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Fig 1

A

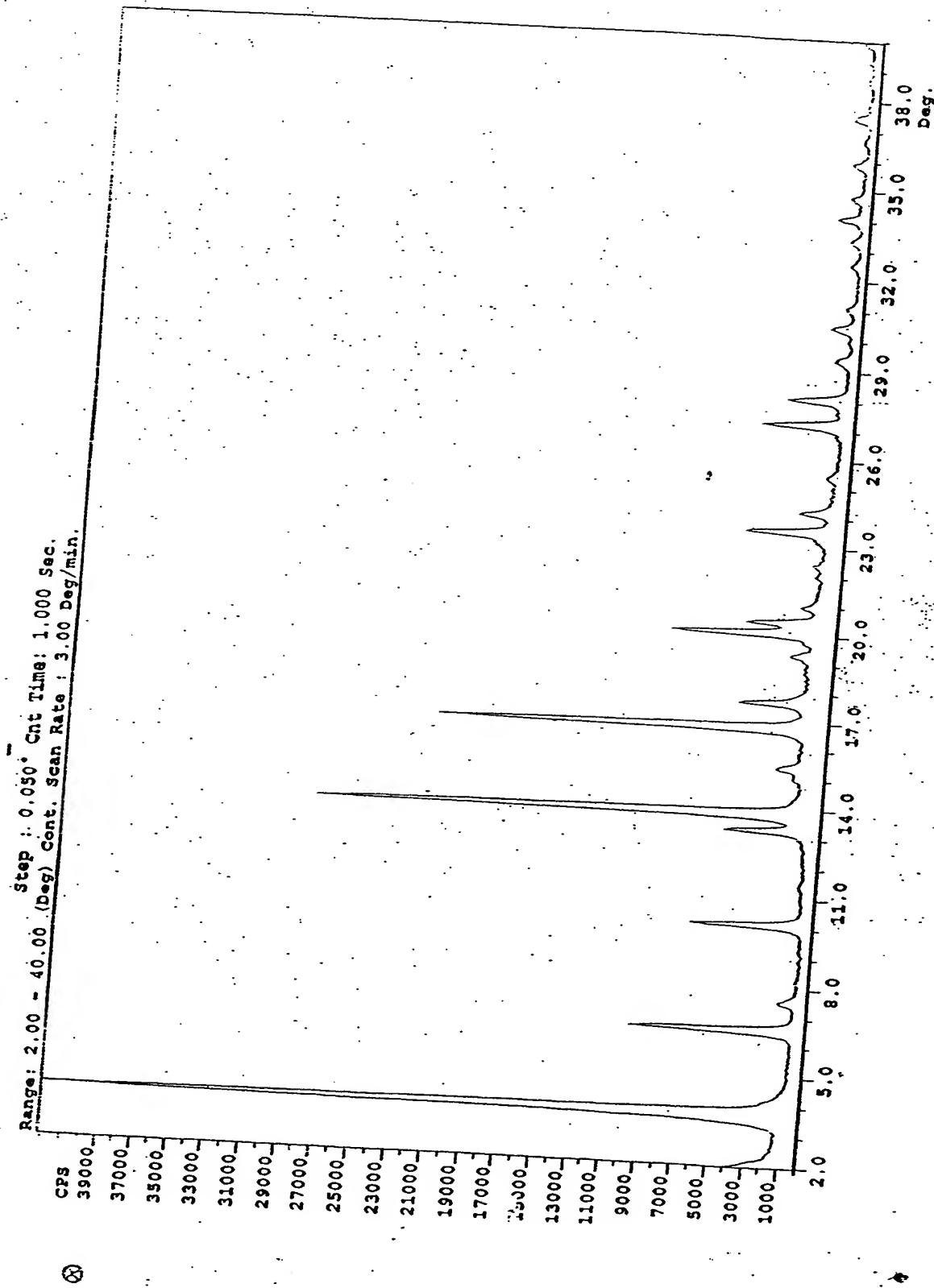


Fig. 2 C

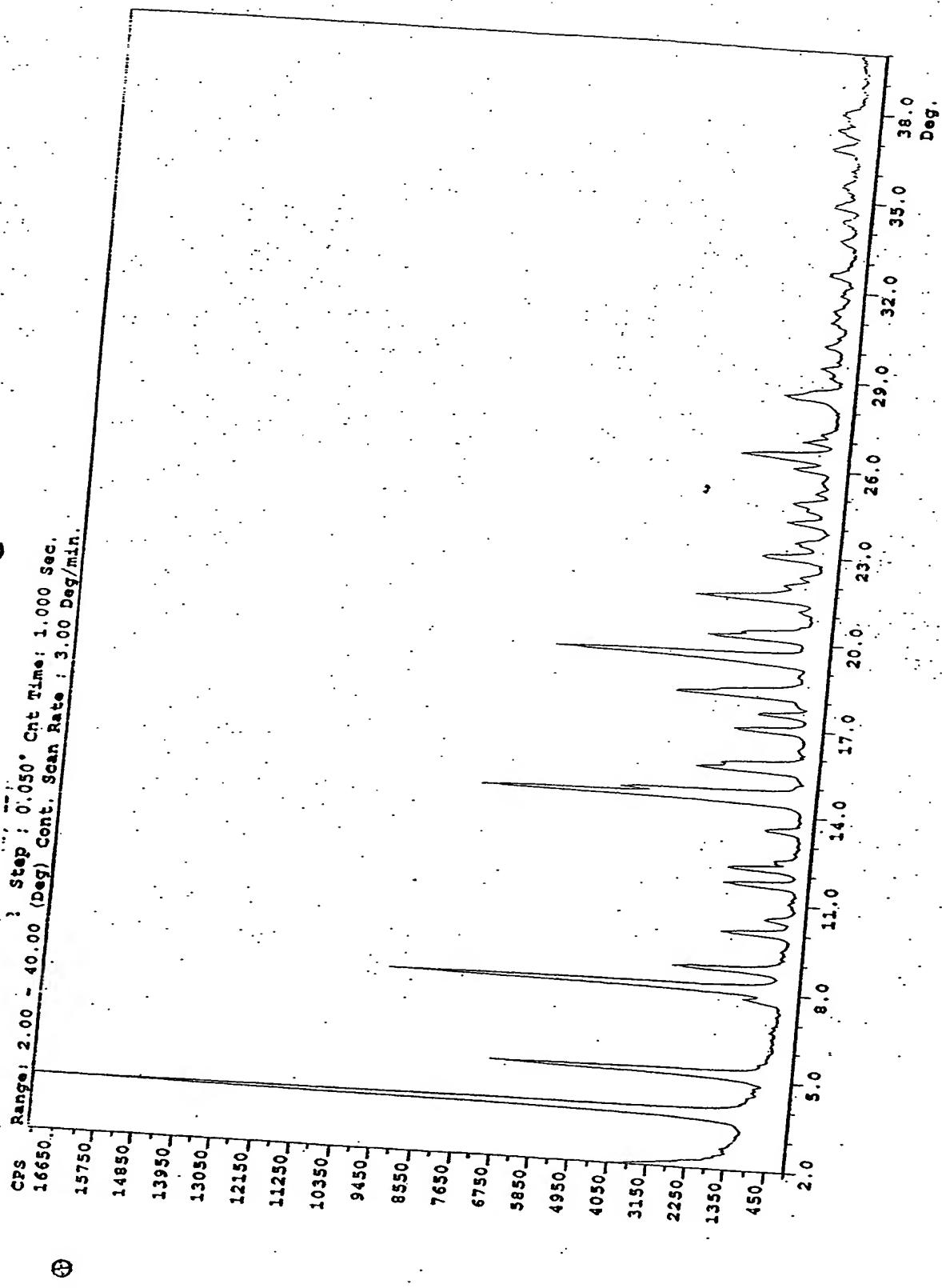


Fig 3 D

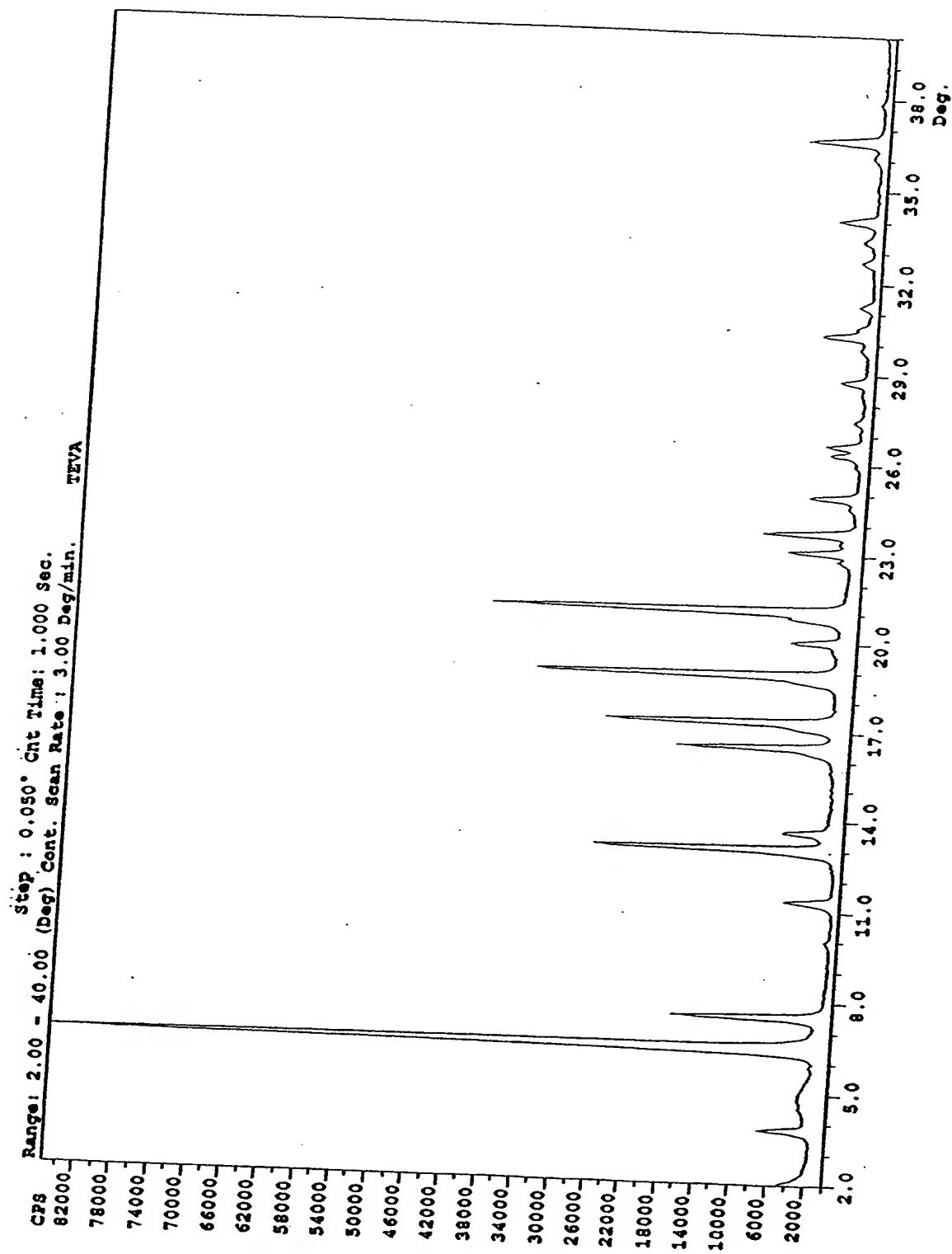


Fig 4 E

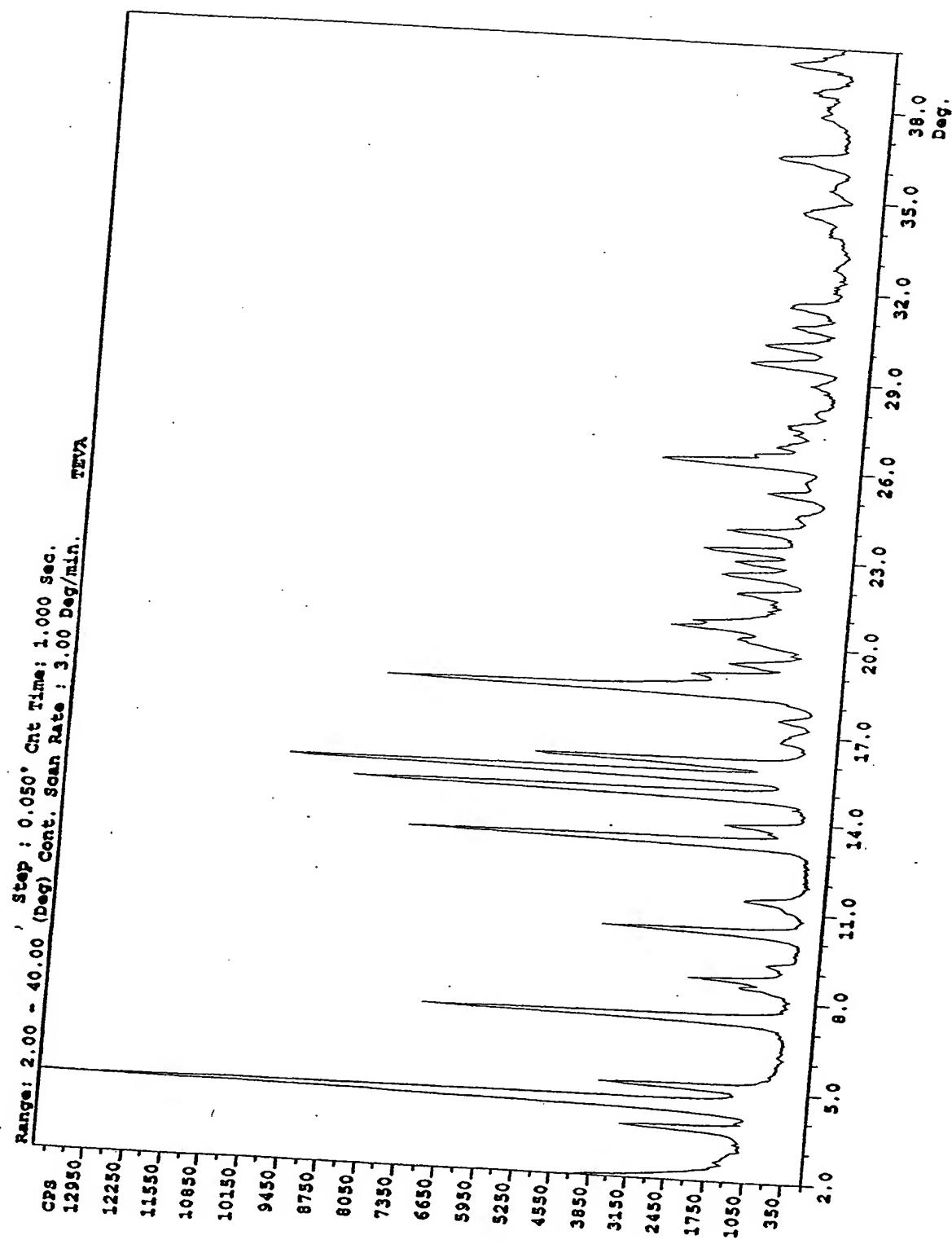


Fig. 5

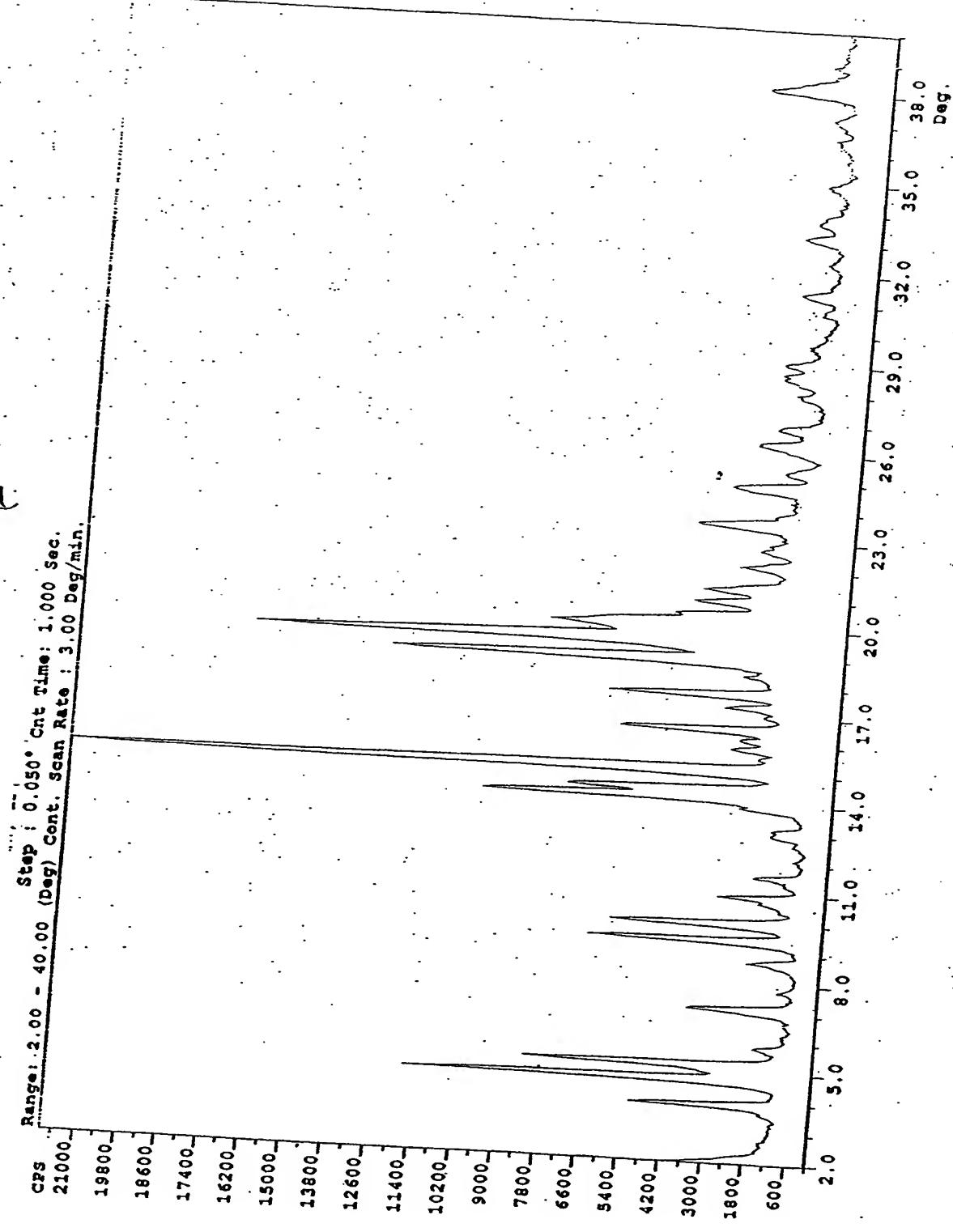


Fig. 6

G

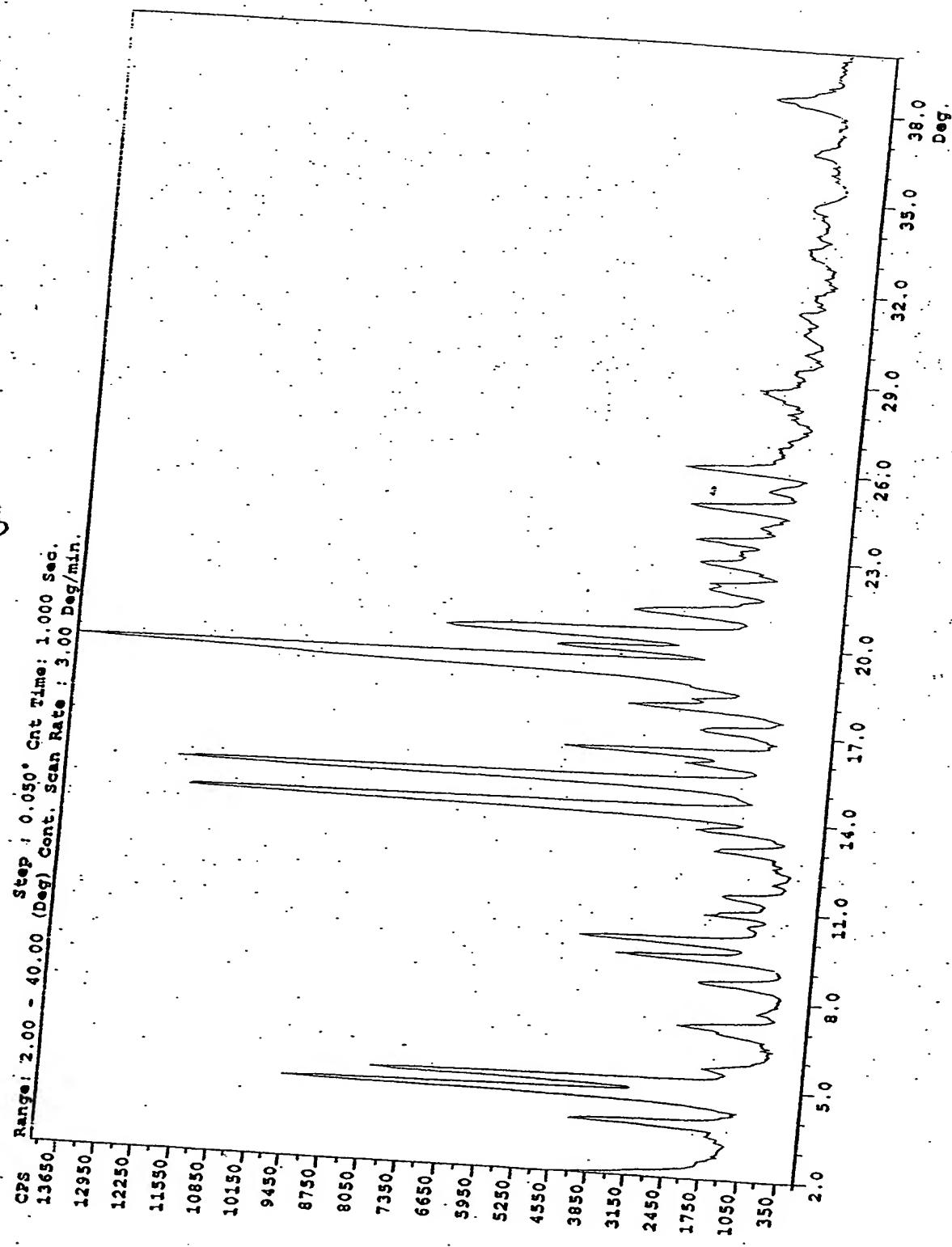


Fig 7 T

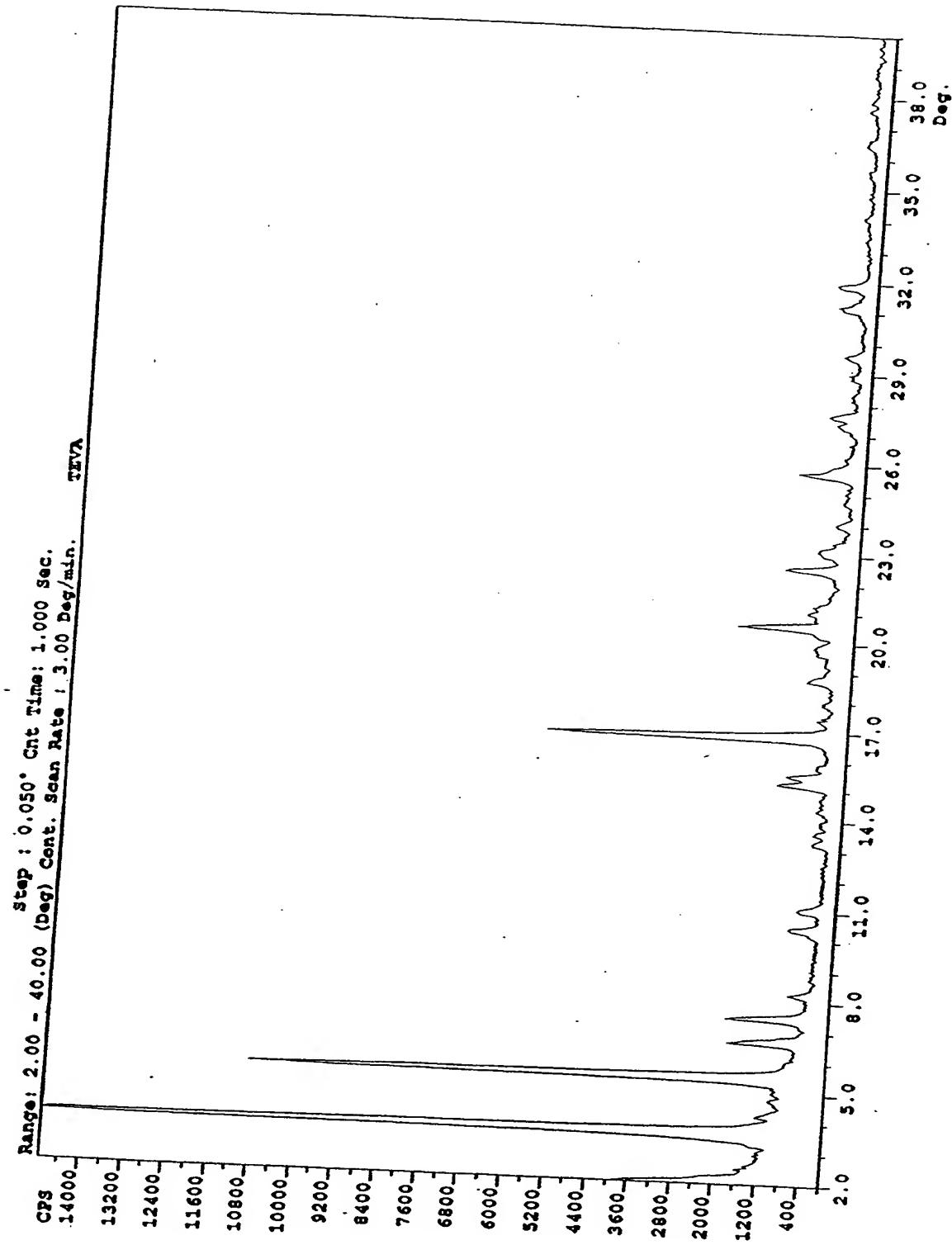


Fig. 8 J

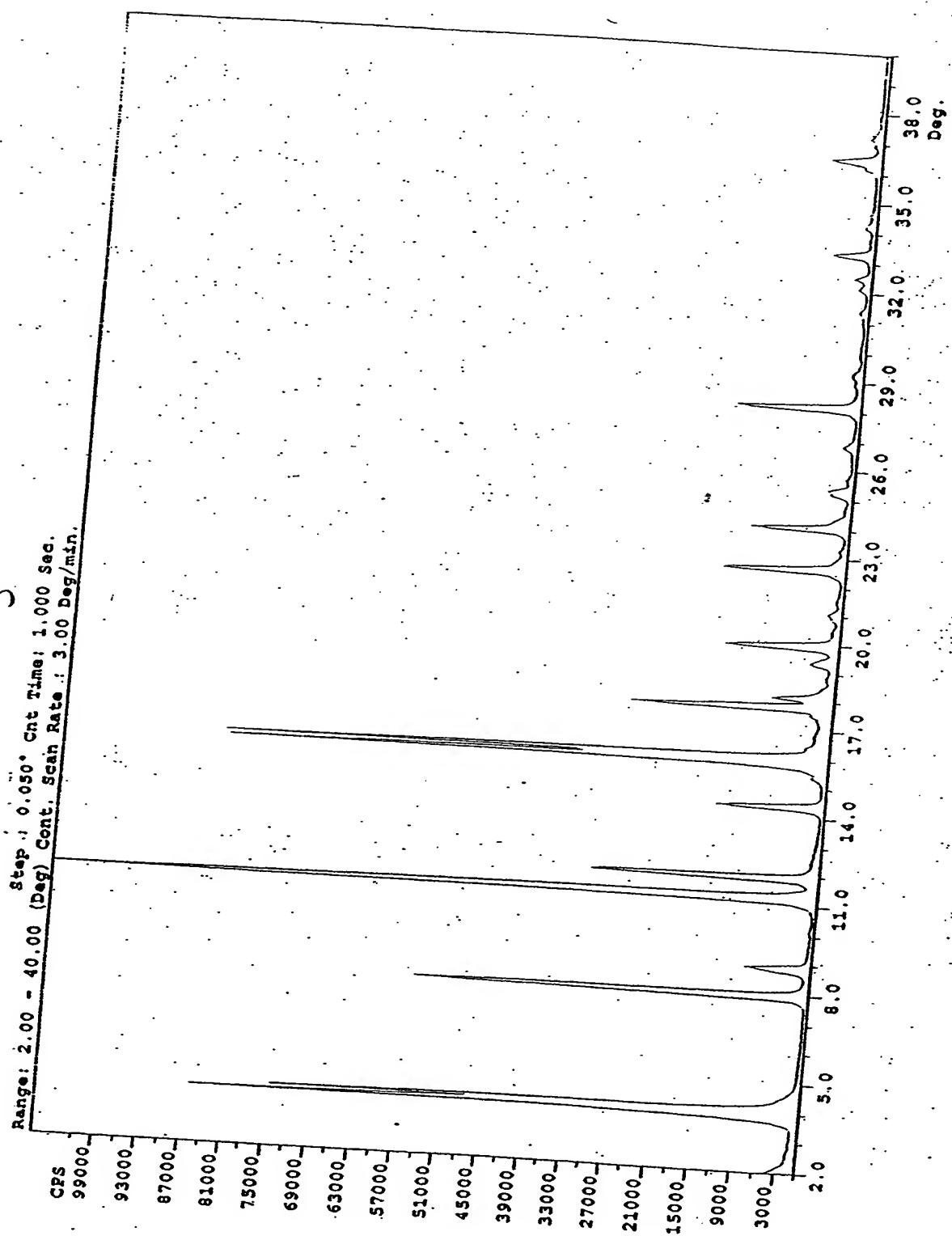


Fig. 9

(K)

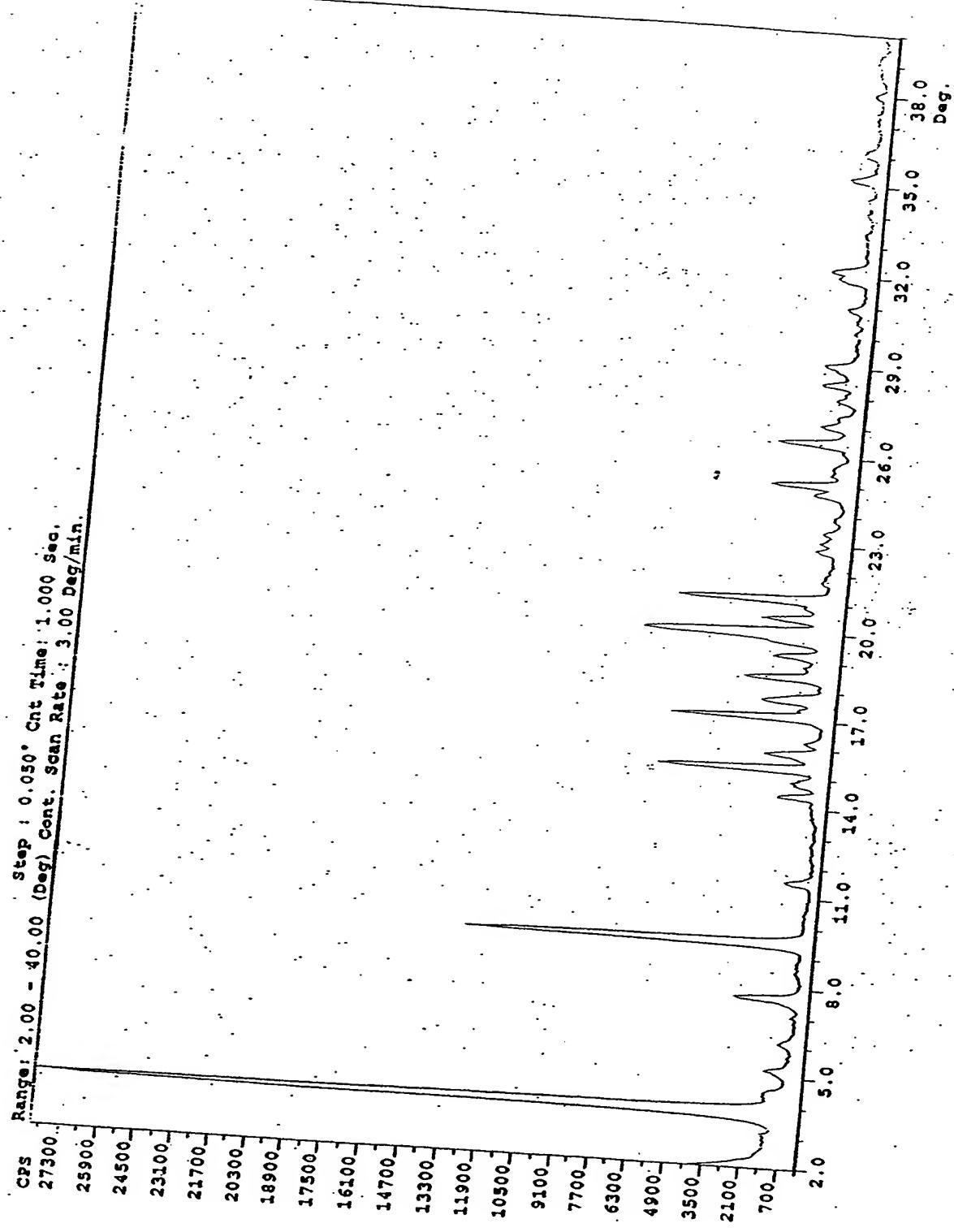
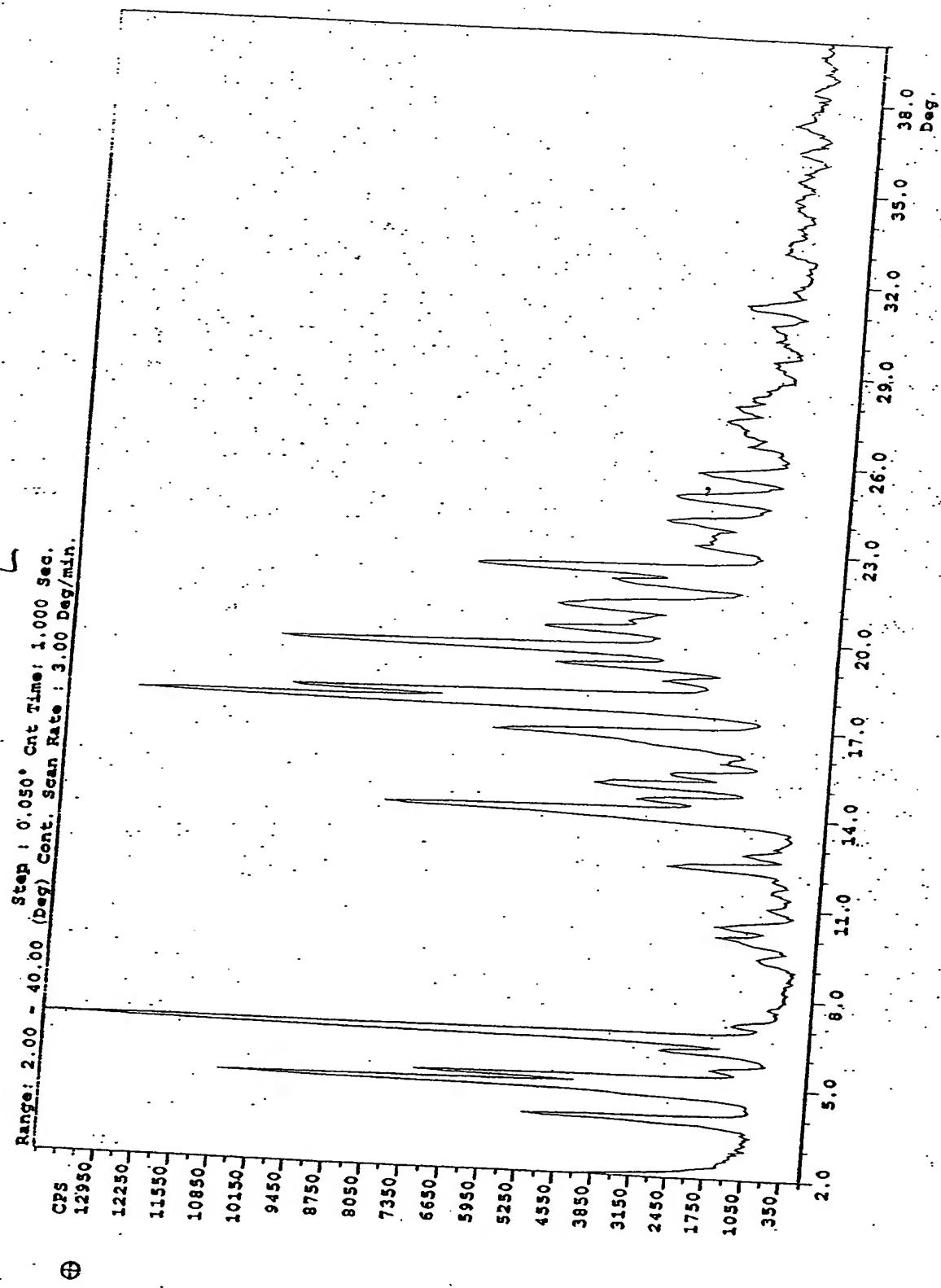


Fig. 10 L



679. 11

M
679. 11
Range: 2.00 - 40.00. Step : 0.050°. Cnt Time: 1.000 Sec.
CPS
7000
6600
6200
5800
5400
5000
4600
4200
3800
3400
3000
2600
2200
1800
1400
1000
600
200

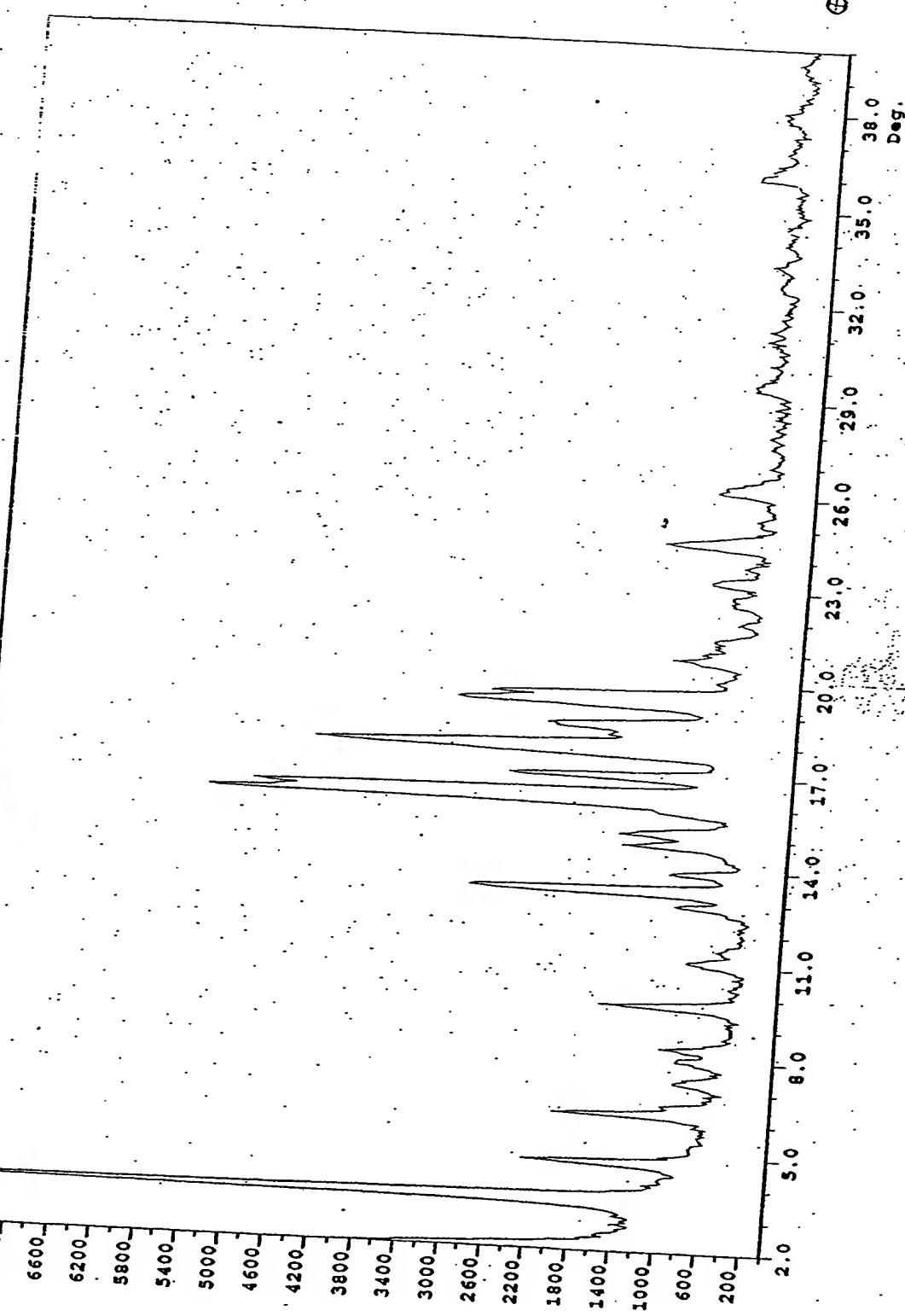


Fig. 12

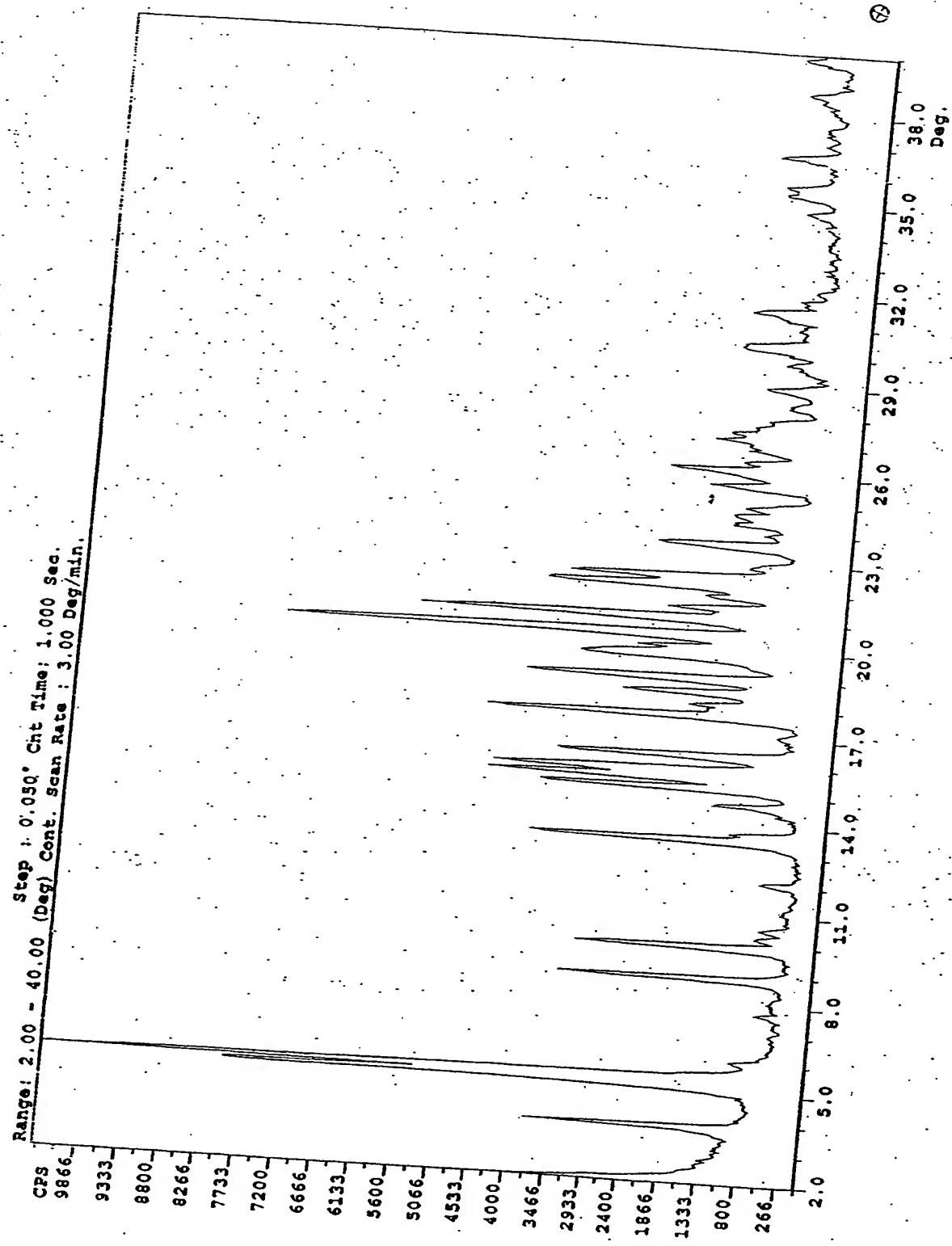


Fig. 13

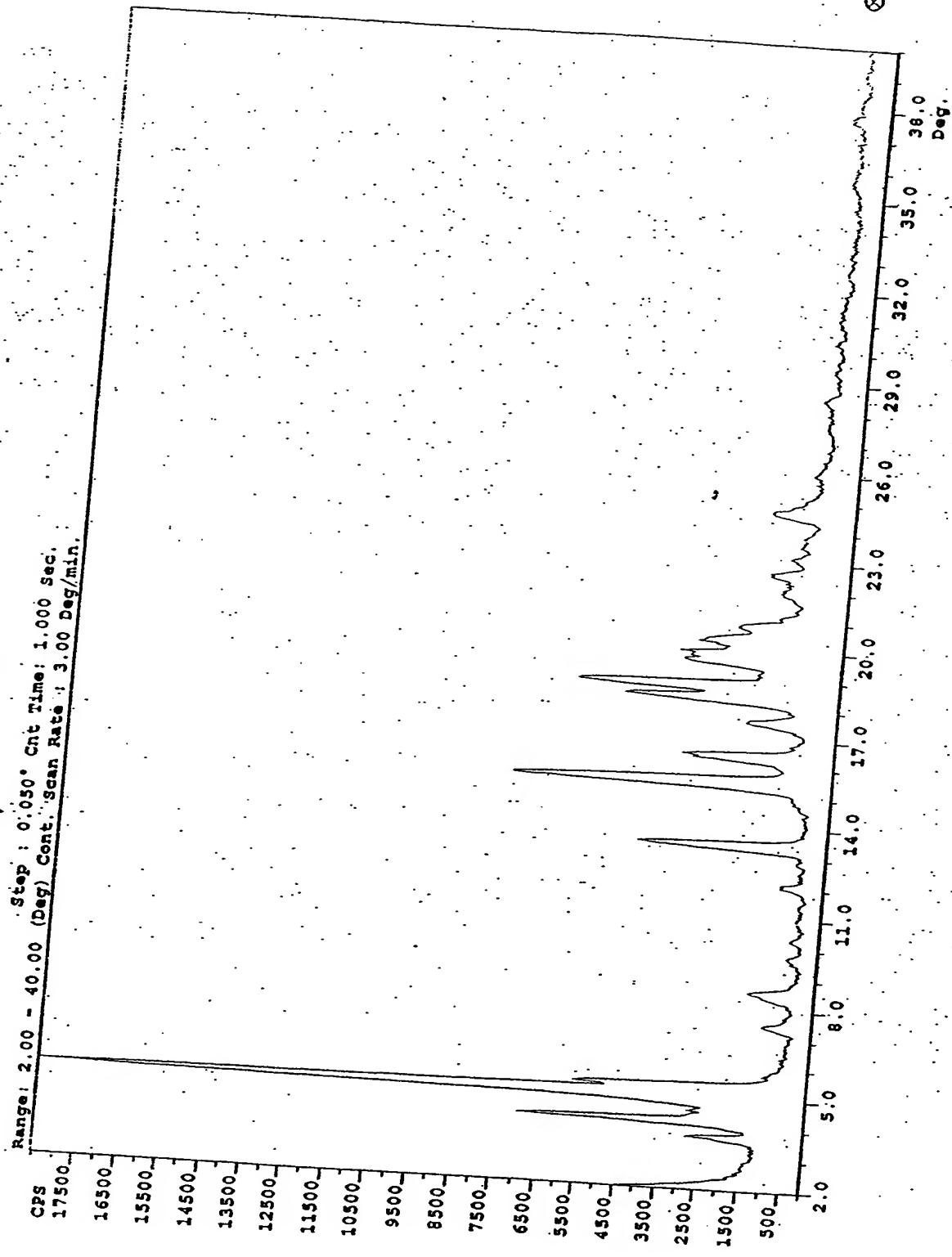


Fig. 14

P

Range: 2.00 - 40.00 Step: 0.050° Cnt Time: 1.000 Sec.
CPS Cont. Scan Rate: 3.00 Deg/min.

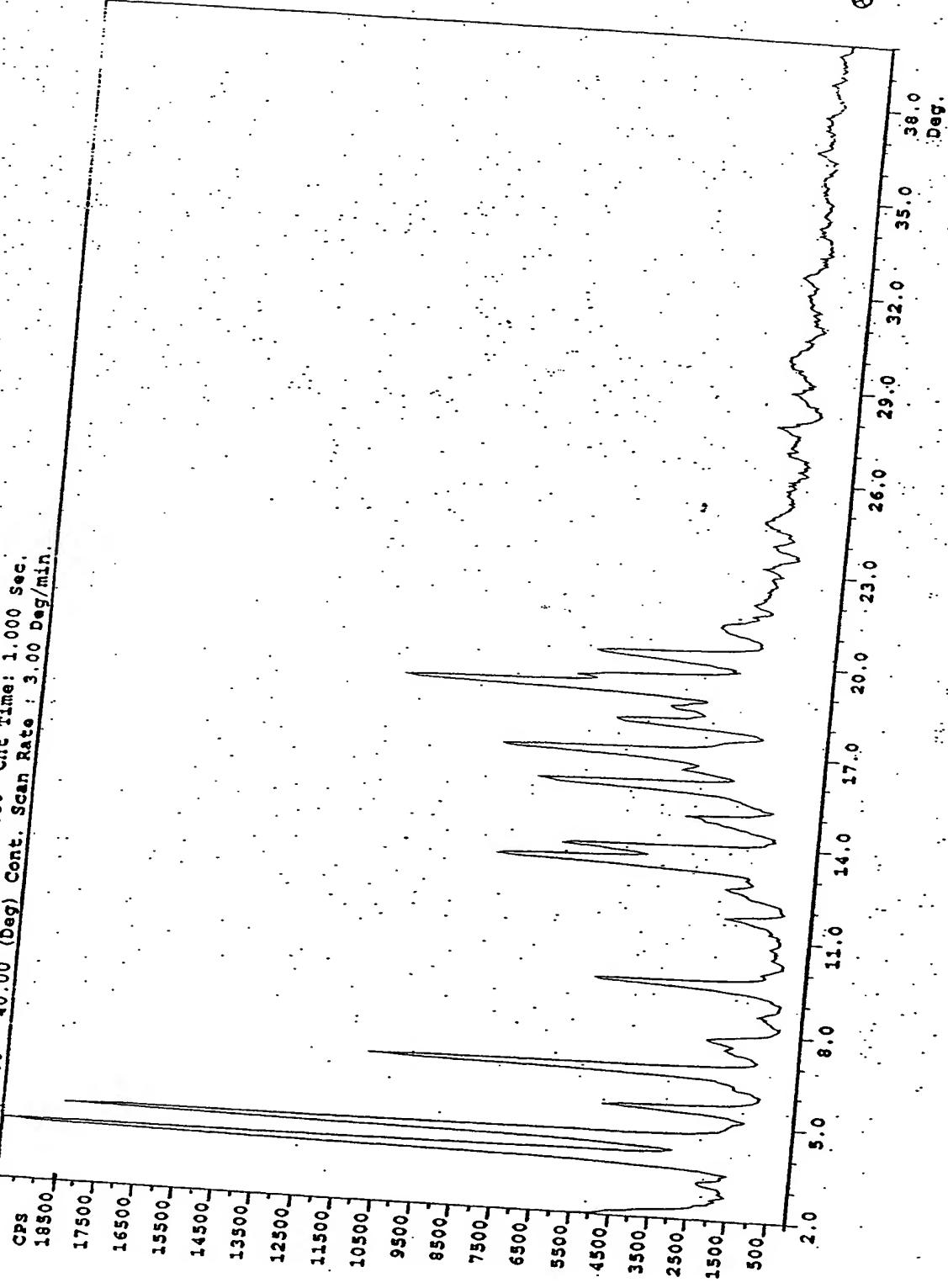
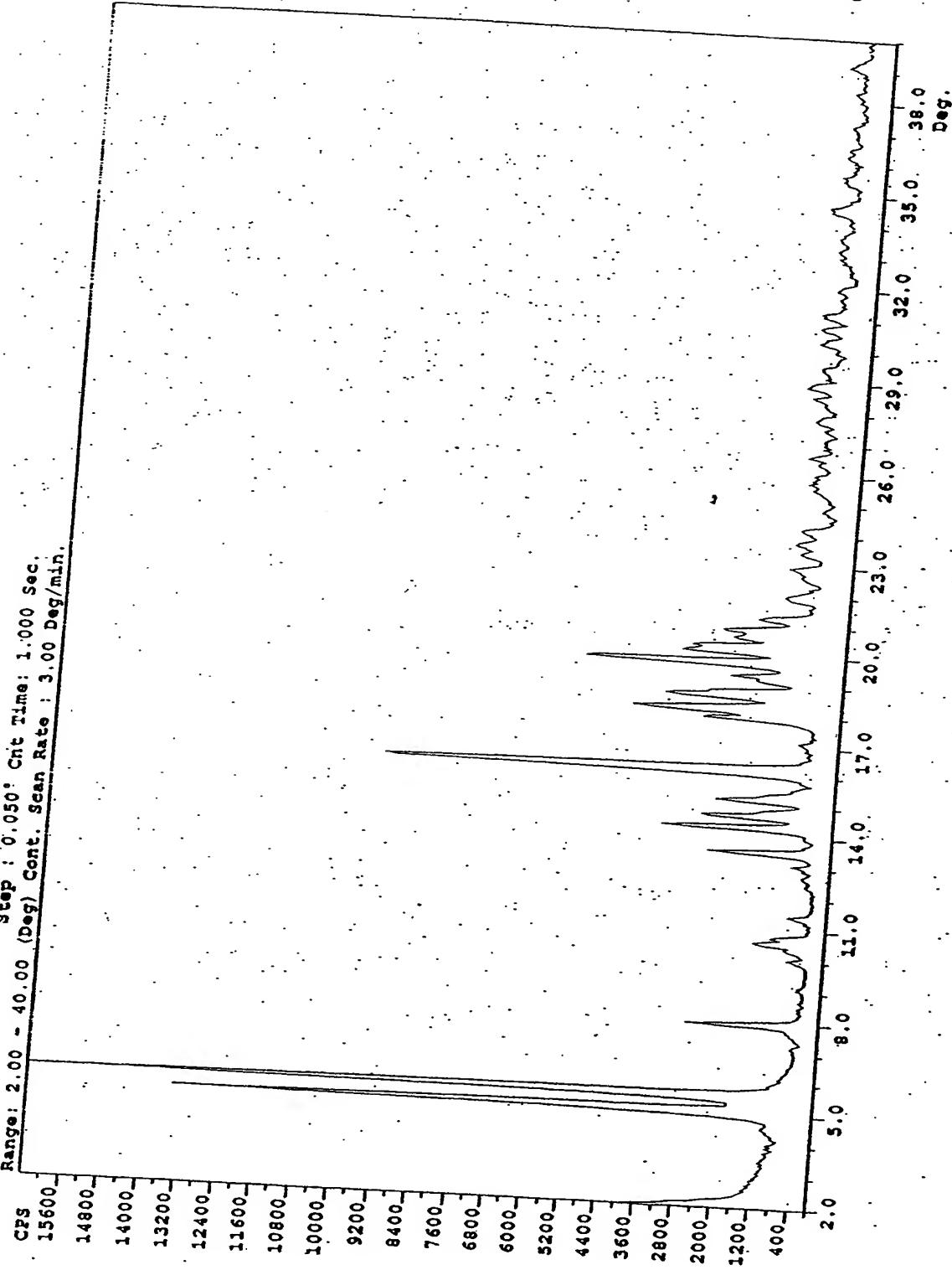


Fig. 15

Q

Step : 0.050! Cnt Time: 1.000 Sec.
Range: 2.00 - 40.00 (Deg) Cont. Scan Rate : 3.00 Deg/min.



4, J. 16

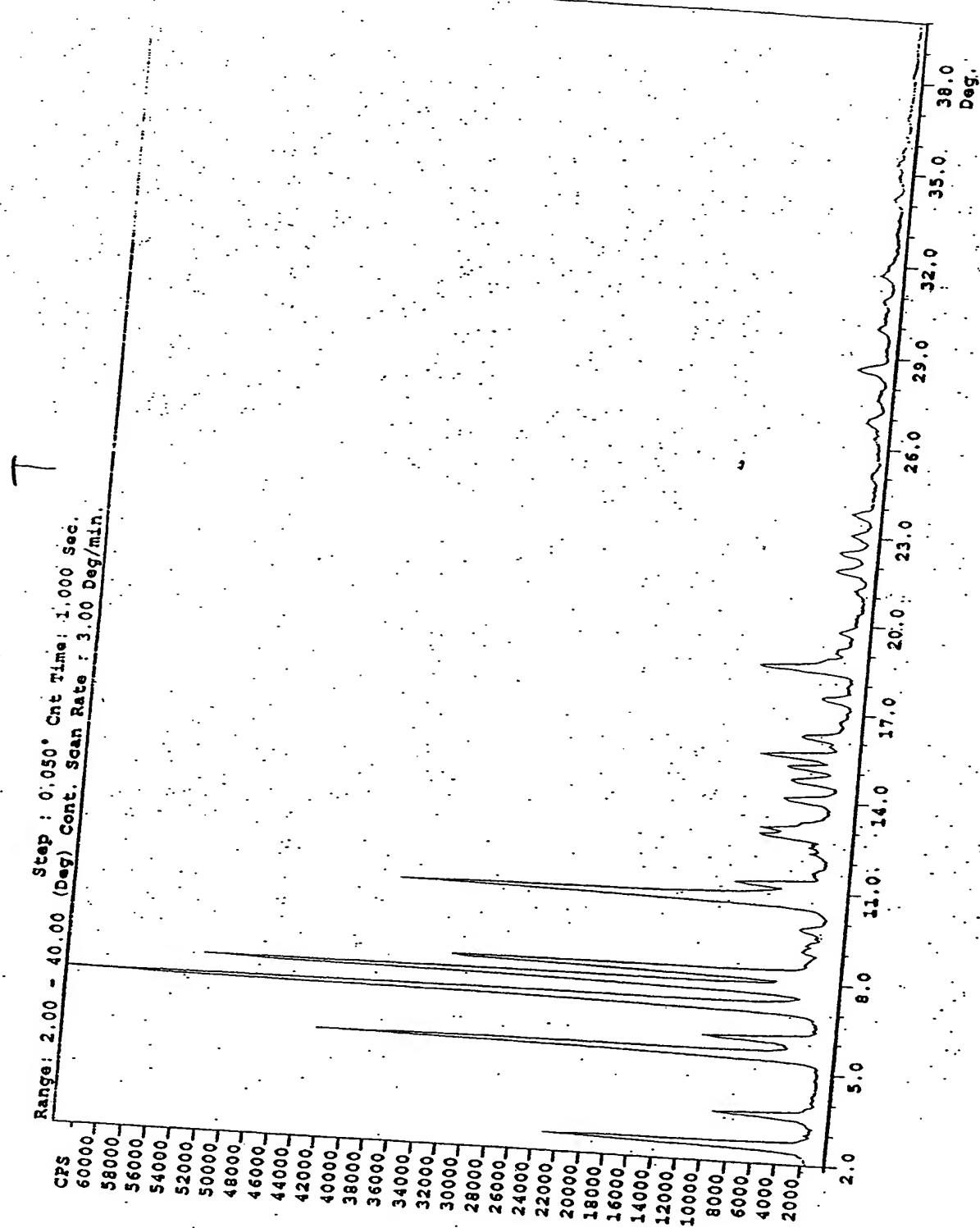


Fig. 17

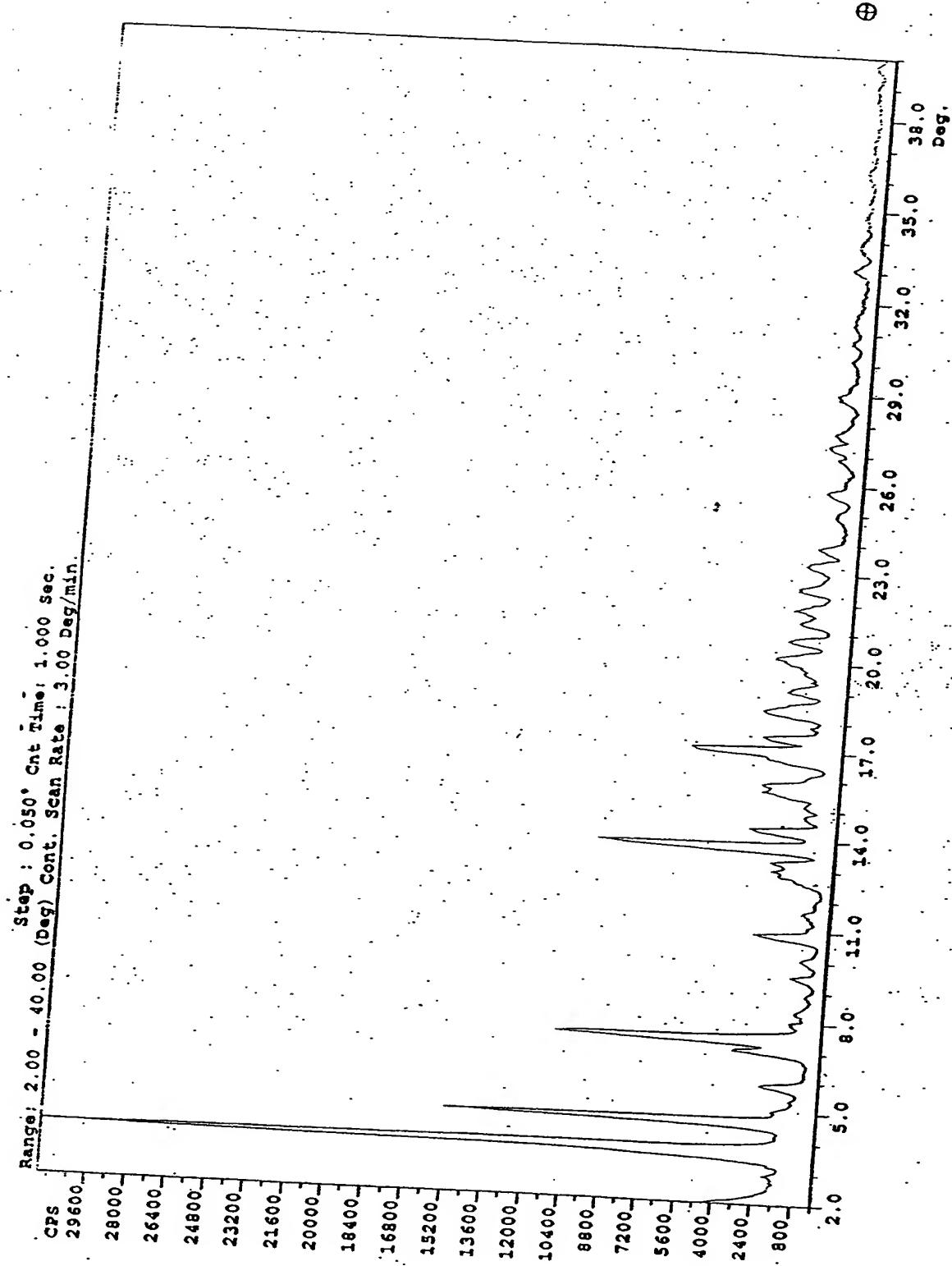


Fig. 18

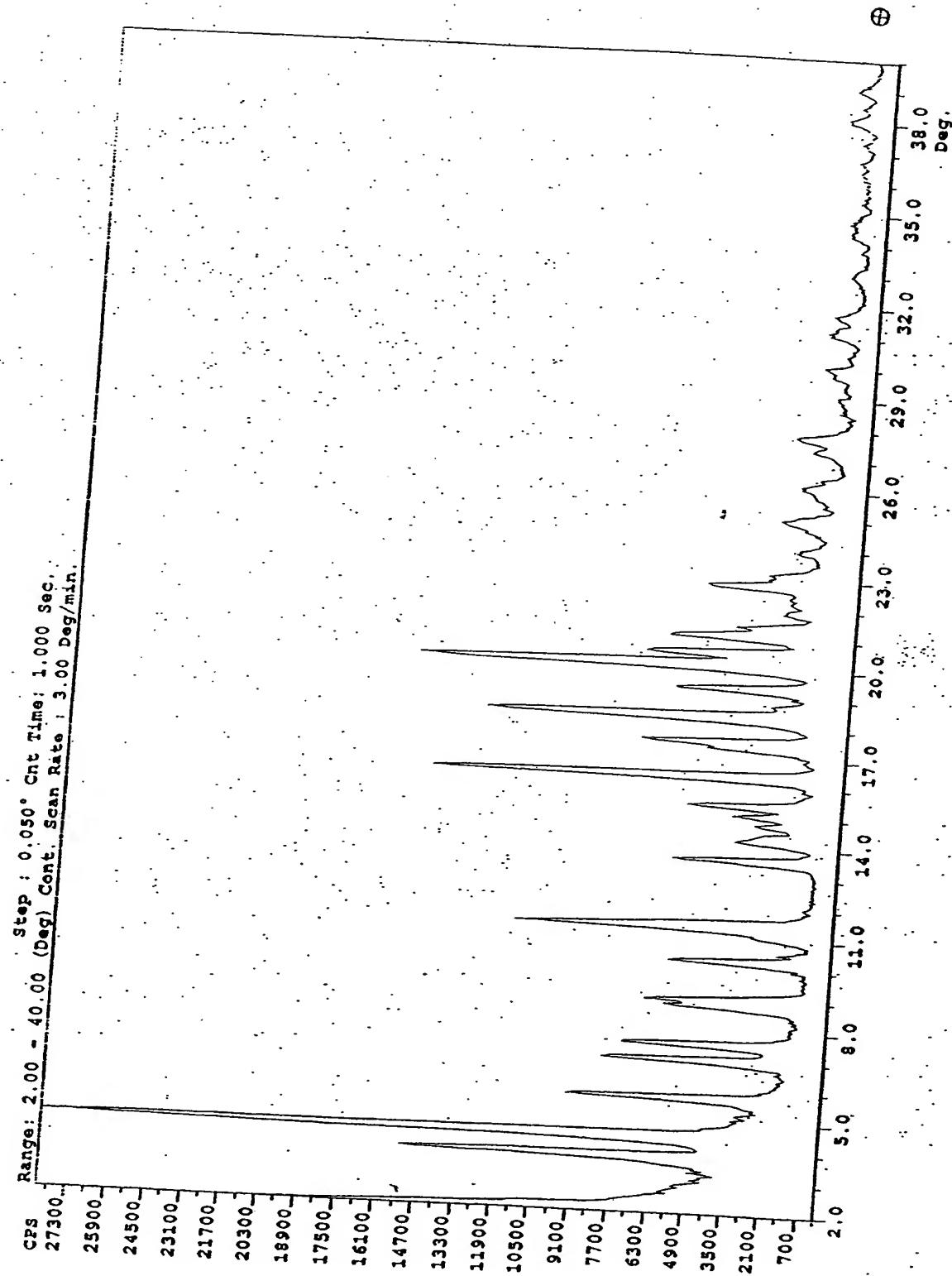


Fig 19

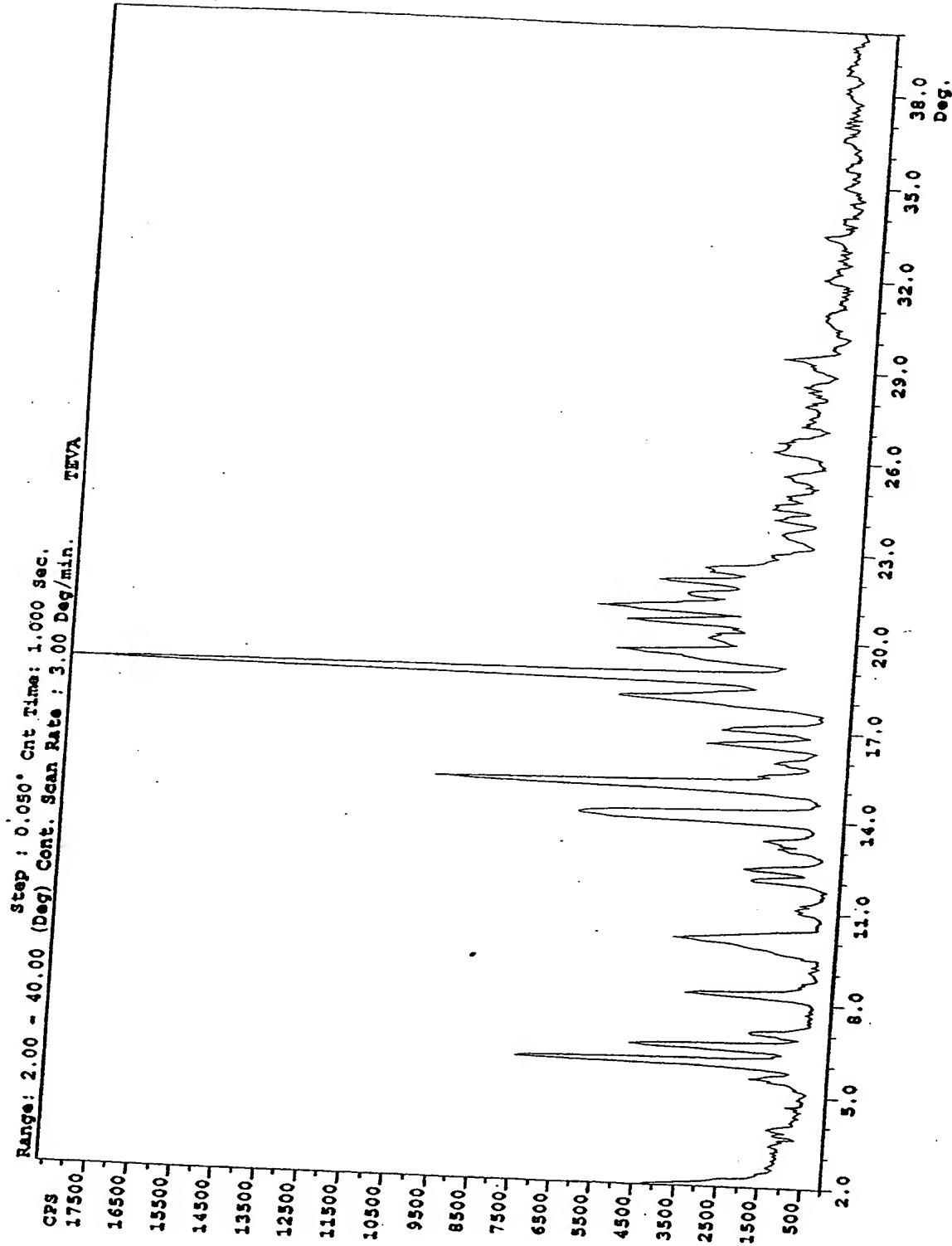


Figure 20 - Natta-gline Form Z

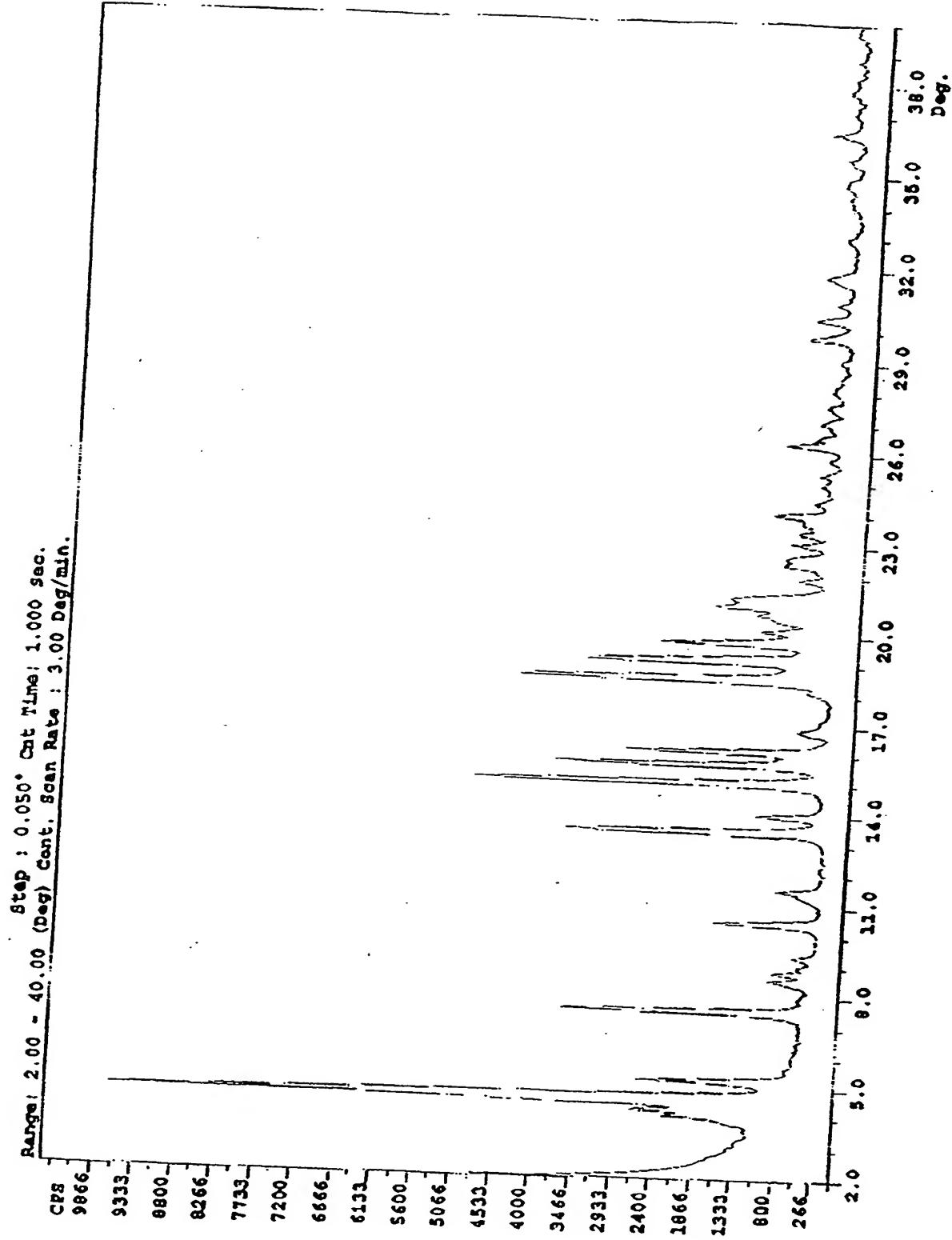


Fig 24 α

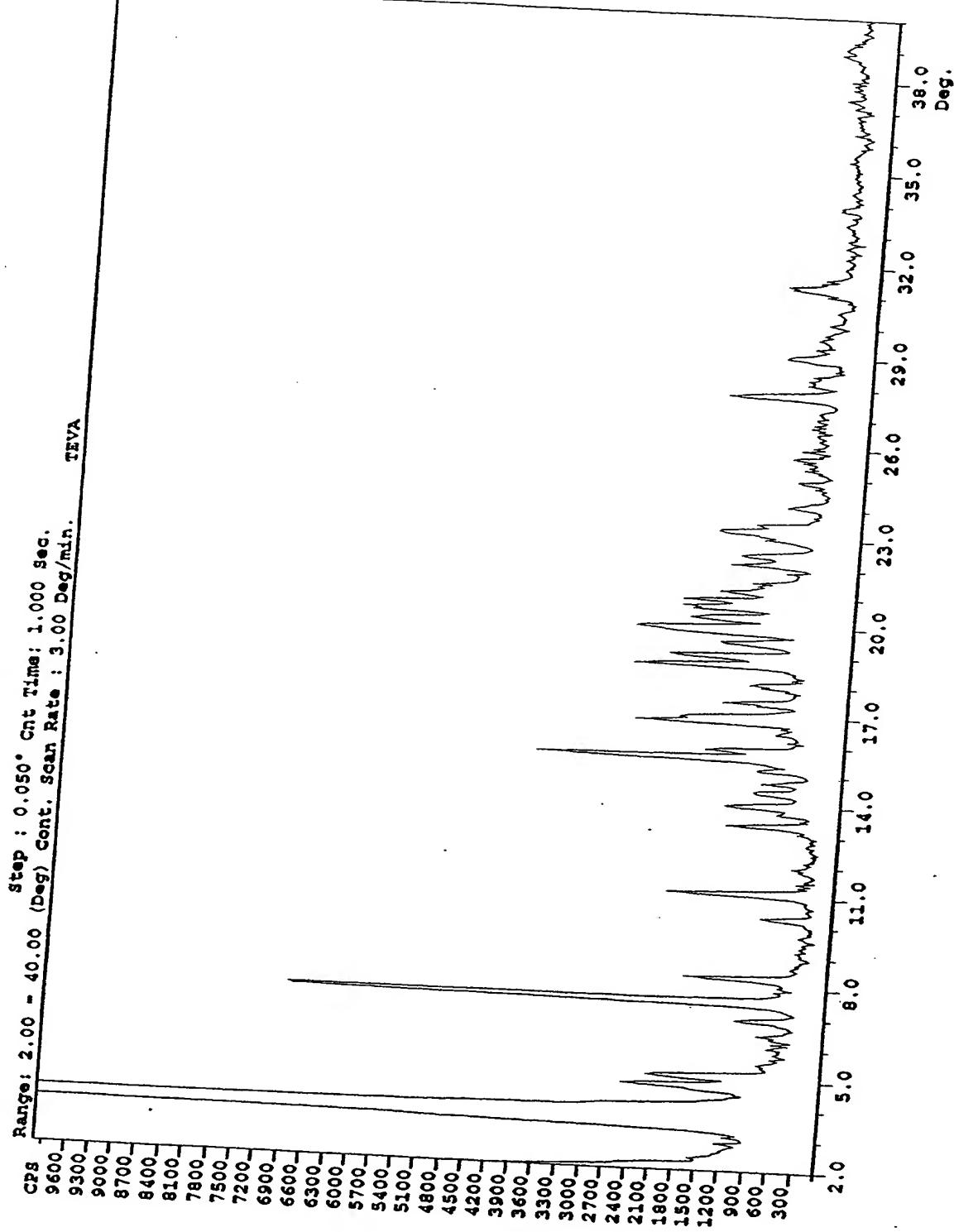


Fig. 28 P

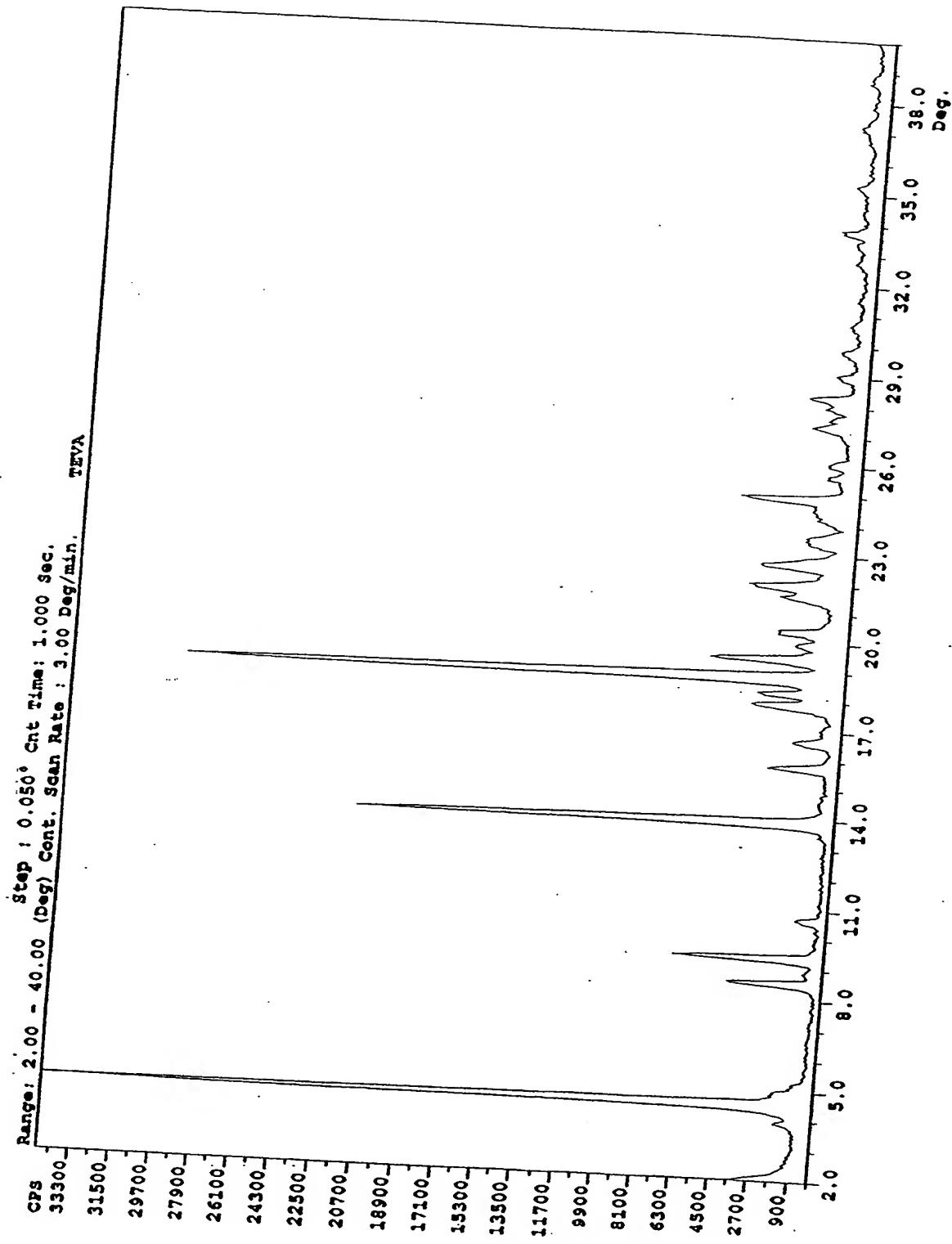
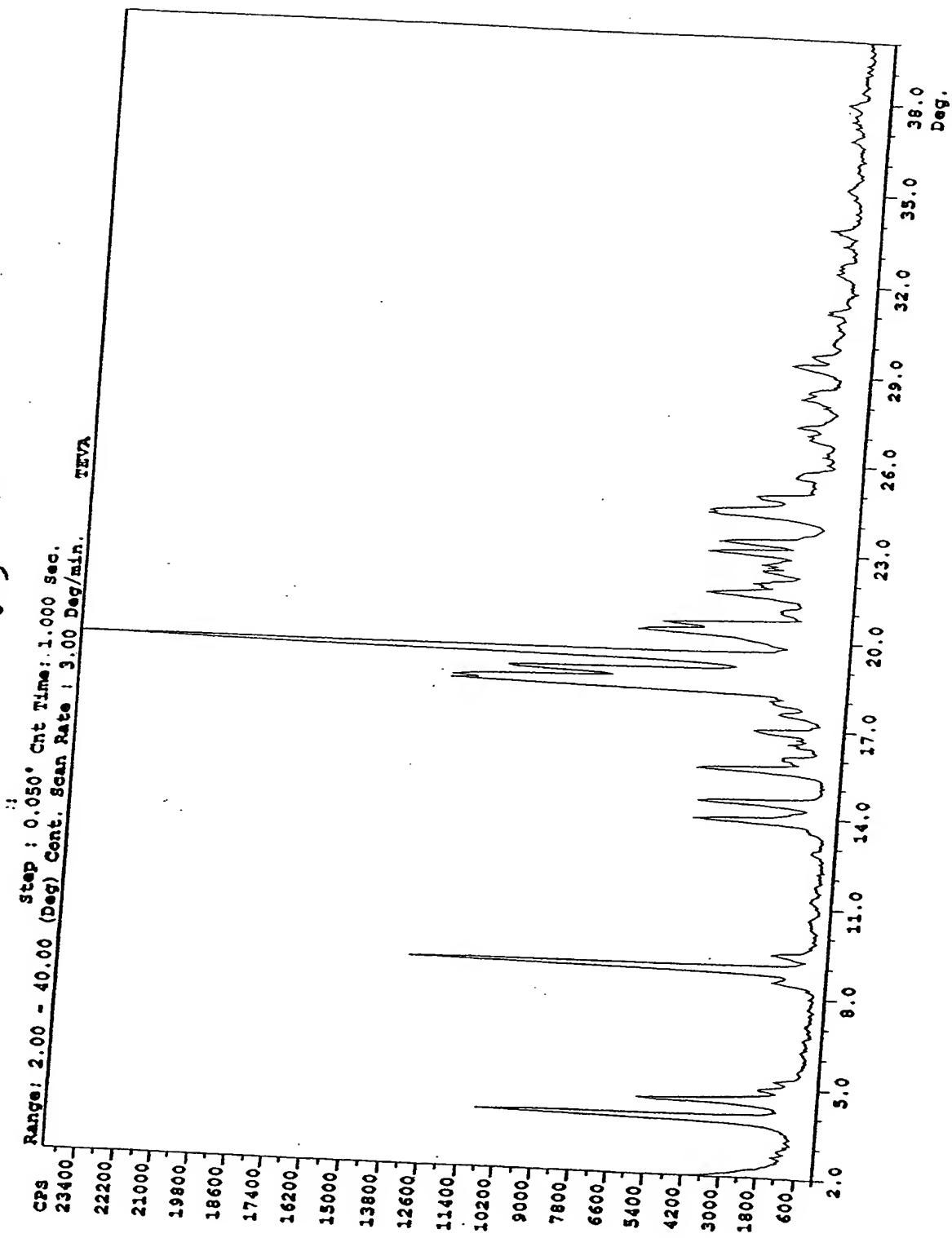


Fig 23 10



5

Fig. 24

Range: 2.00 - 40.00 Step : 0.050° Cnt Time: 1.000 Sec.
CPS 222200
210000
198000
186000
174000
162000
150000
138000
126000
114000
102000
90000
78000
66000
54000
42000
30000
18000
6000

TEVA

Scan Rate : 3.00 Deg/min.

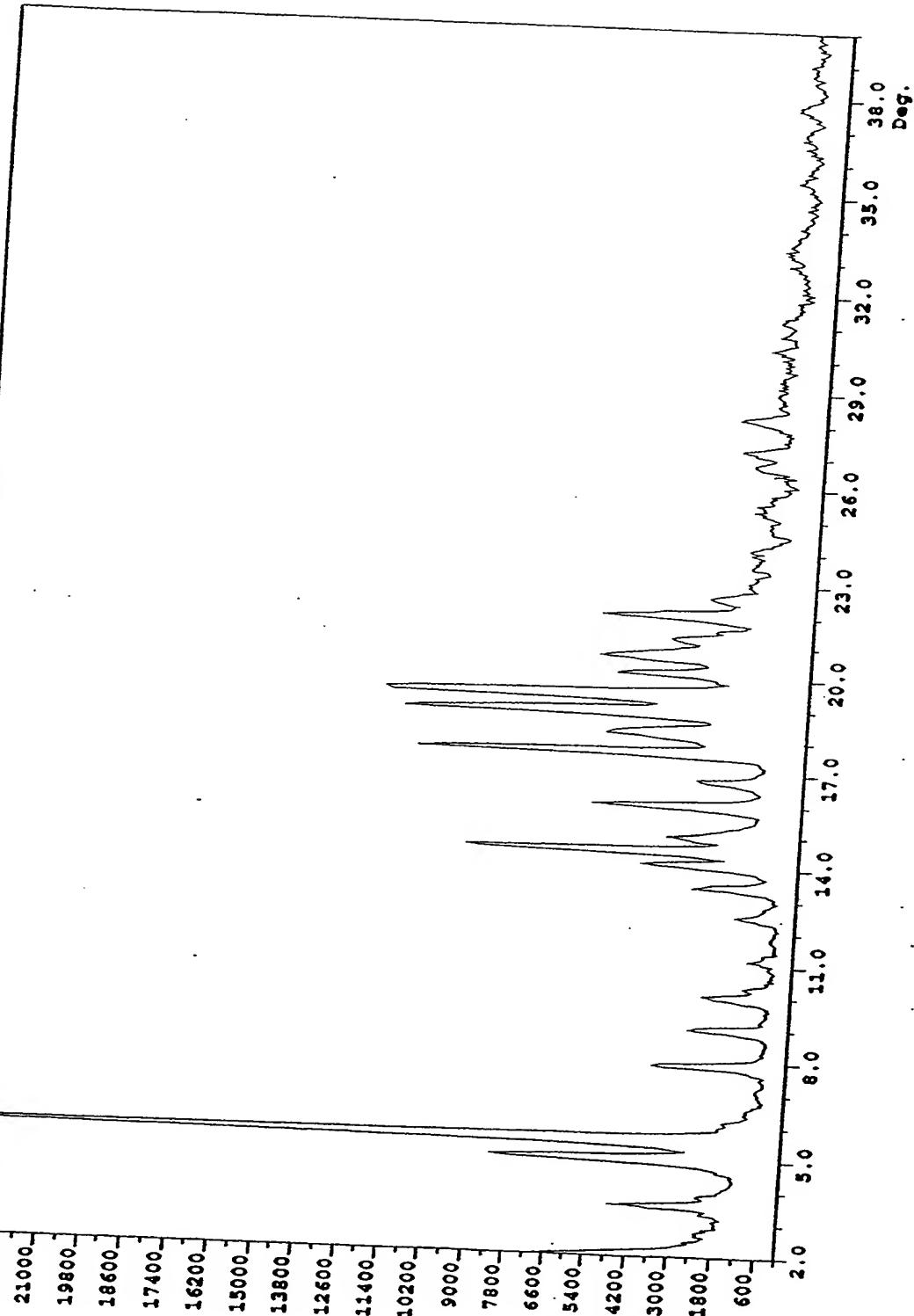


Fig 25

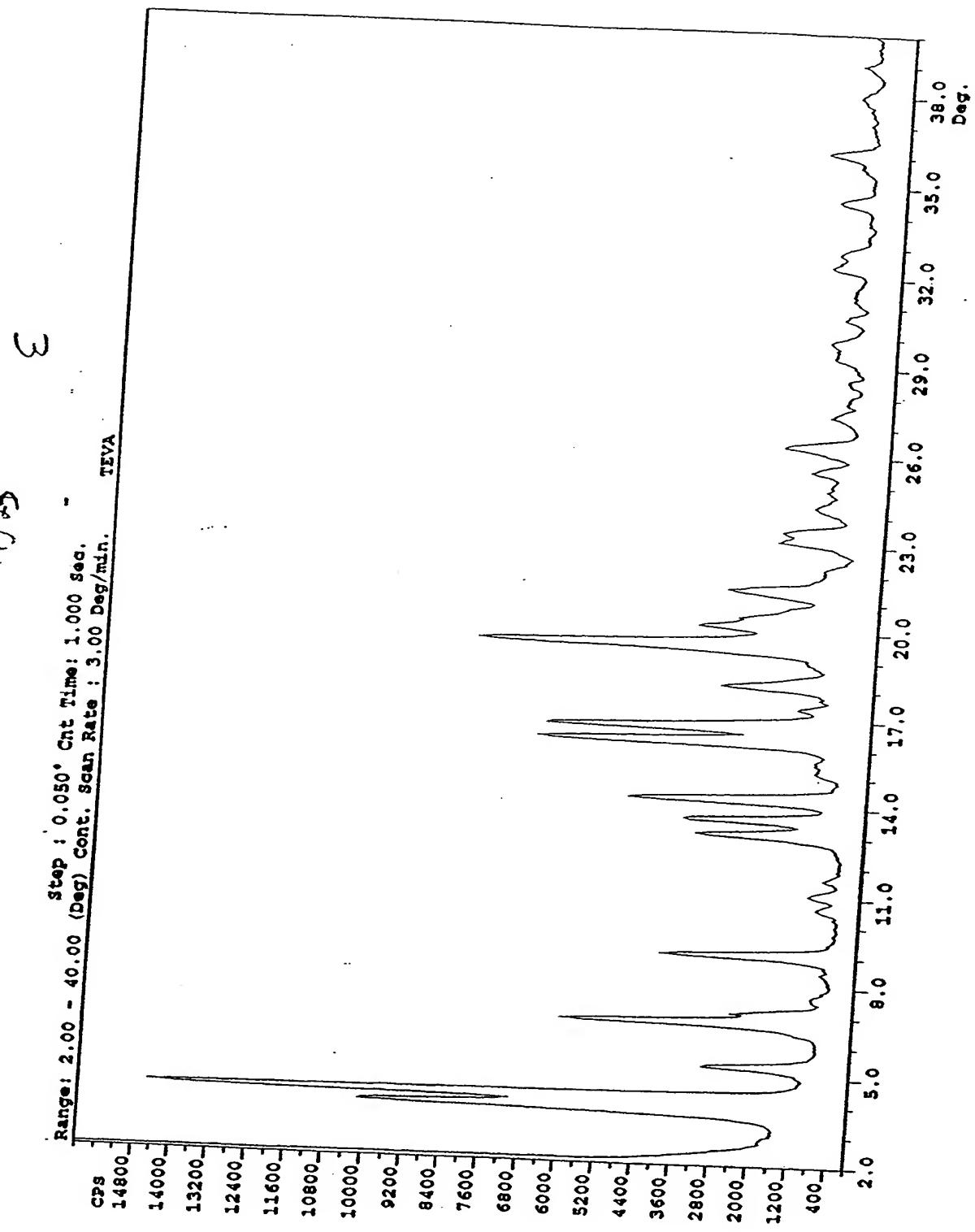


FIGURE 26

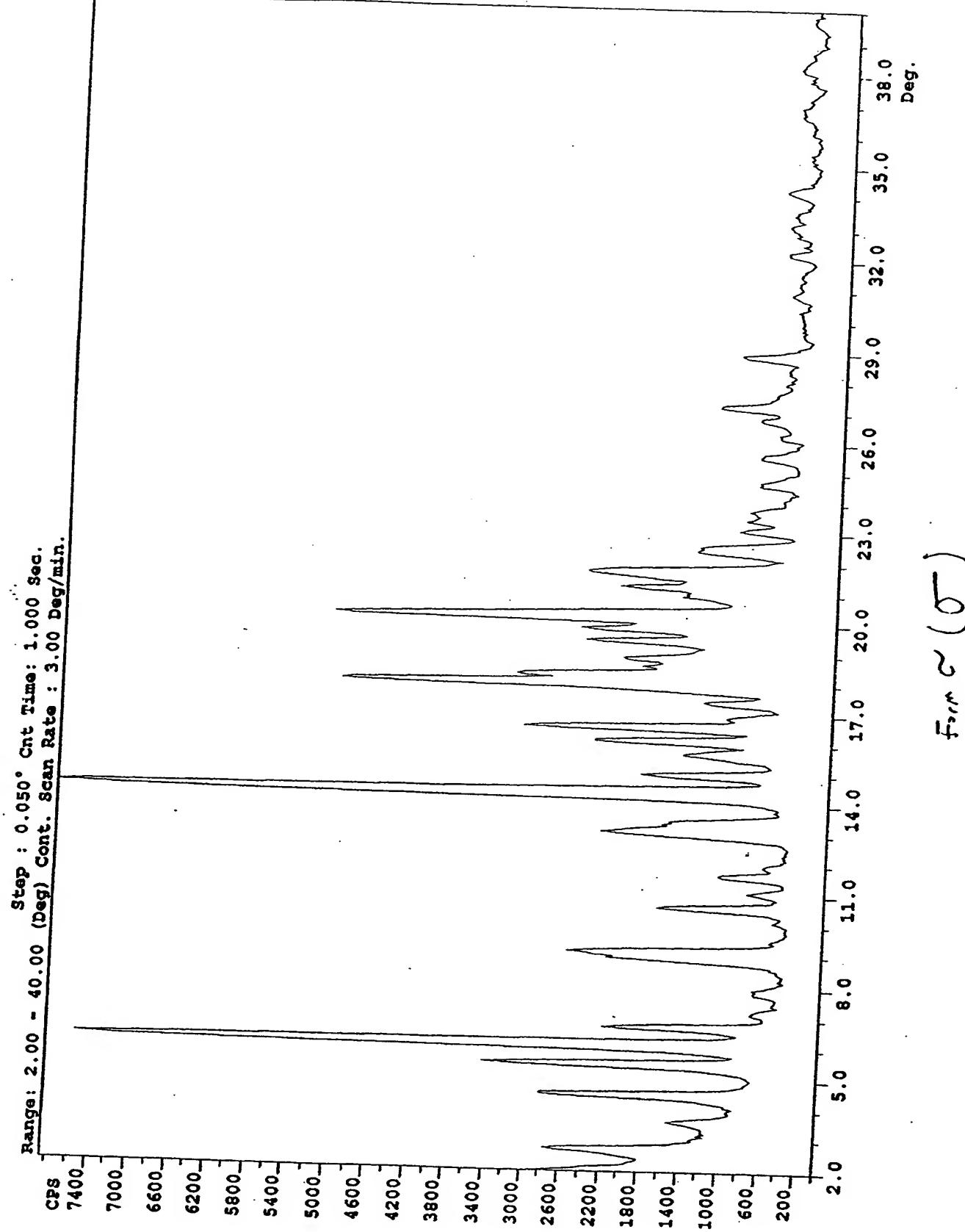


FIGURE 27.

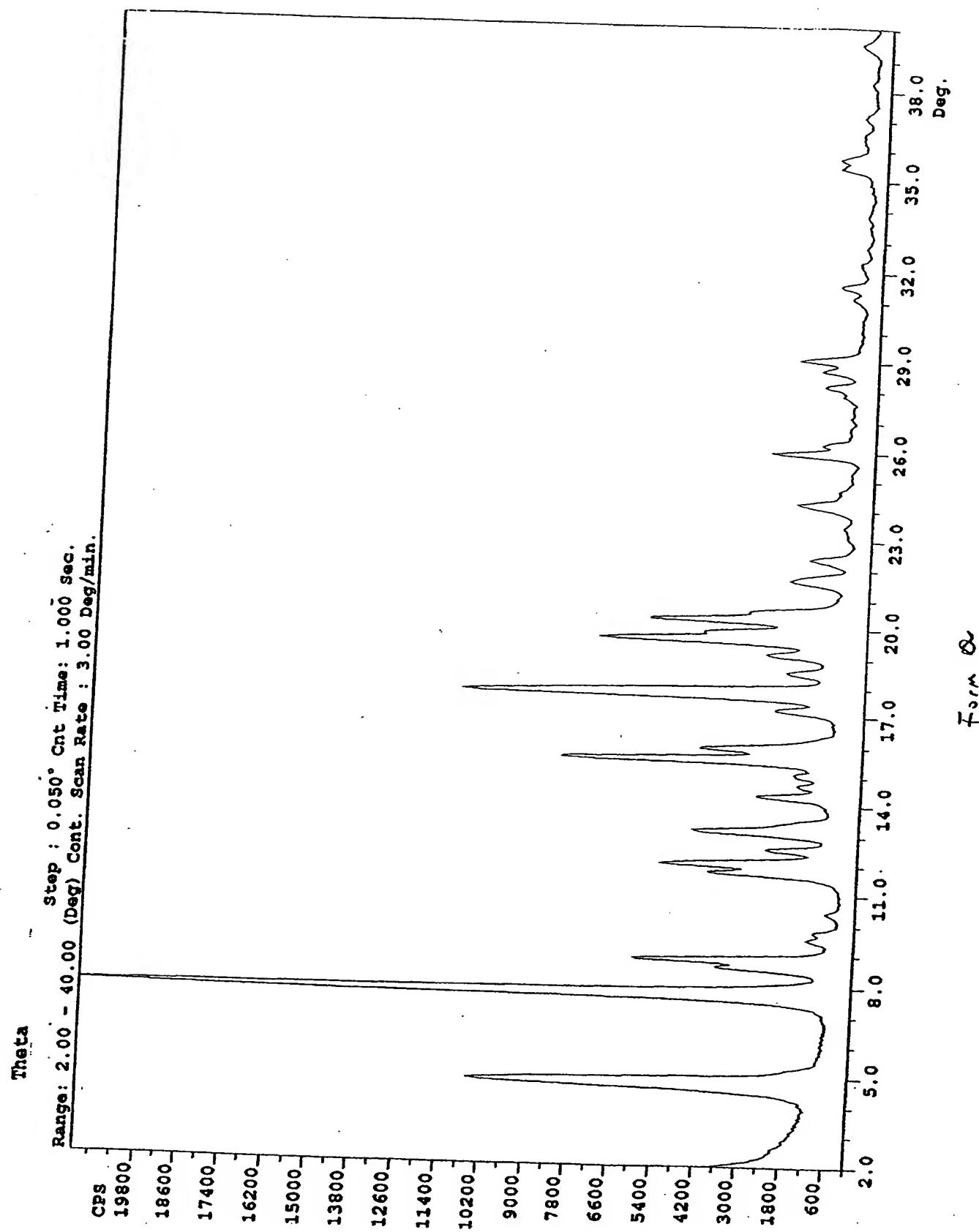
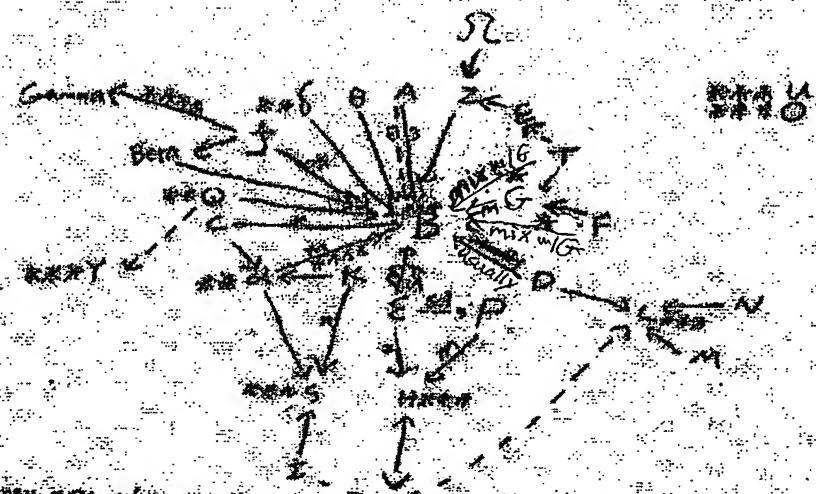


Figure 38 - Thermal stability chart



- * Transformation may proceed through partial or complete
decomposition at lower heating temperatures (e.g. 50°C)
- ** Thermally stable polymers
- Transformation after storage at room temperature

Keep when starting material contains seeds.

Results might vary depending on the solvate of Pore Exfoliated seeds.

FIGURE 29
Form L

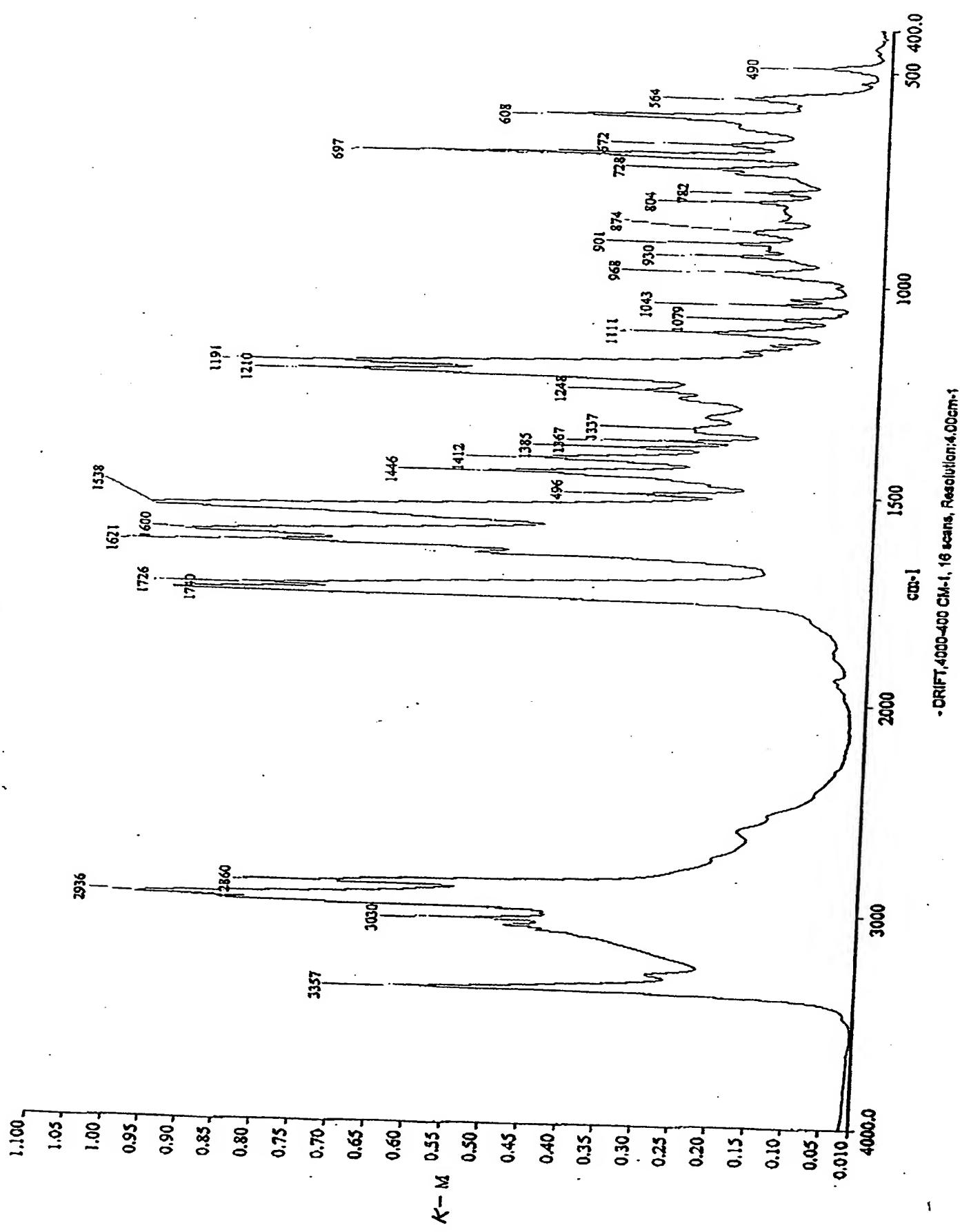


FIGURE 30
FIR SPECTRUM

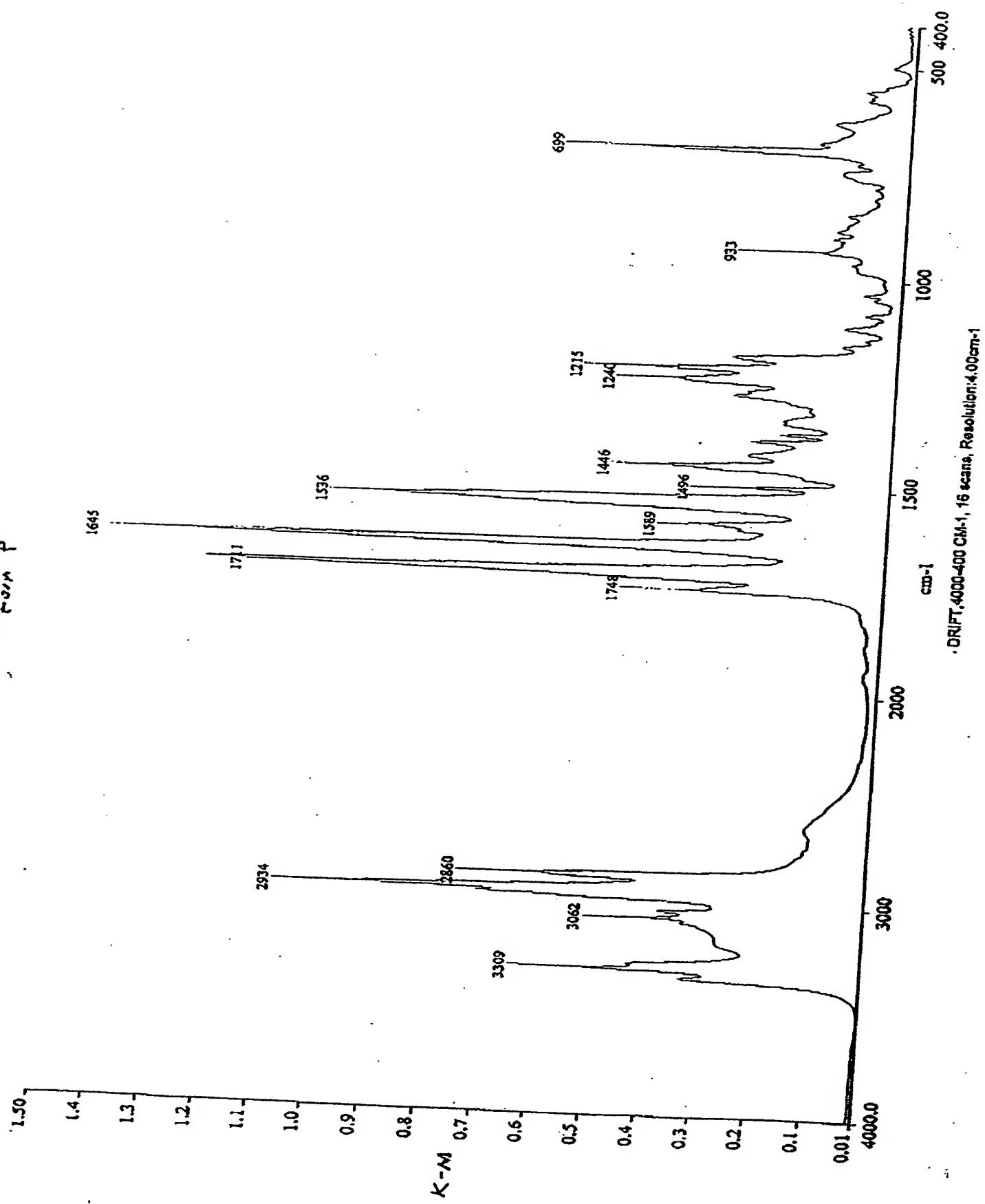


FIGURE 30
Form Q

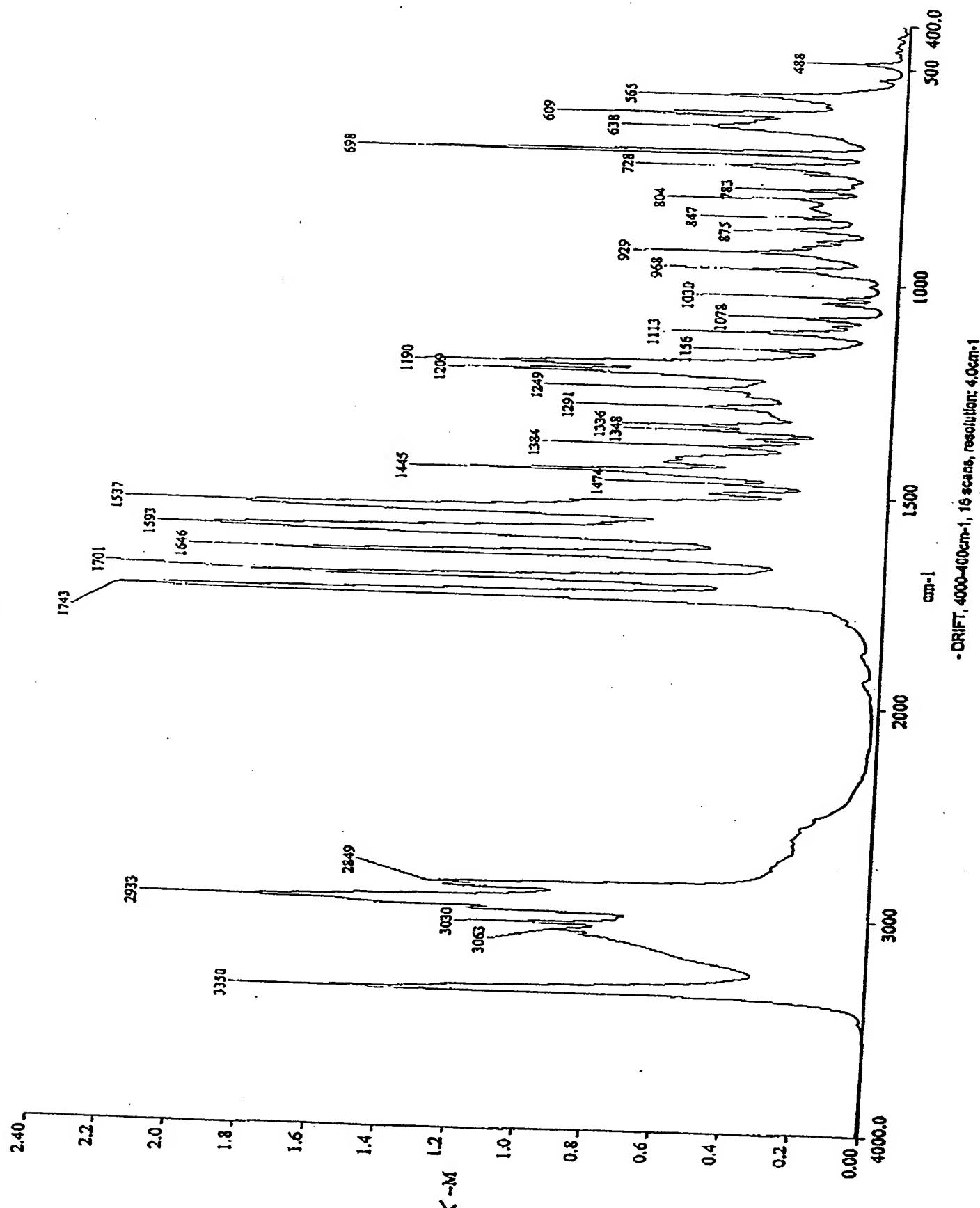


Figure 32 - Nantolinide Form Z

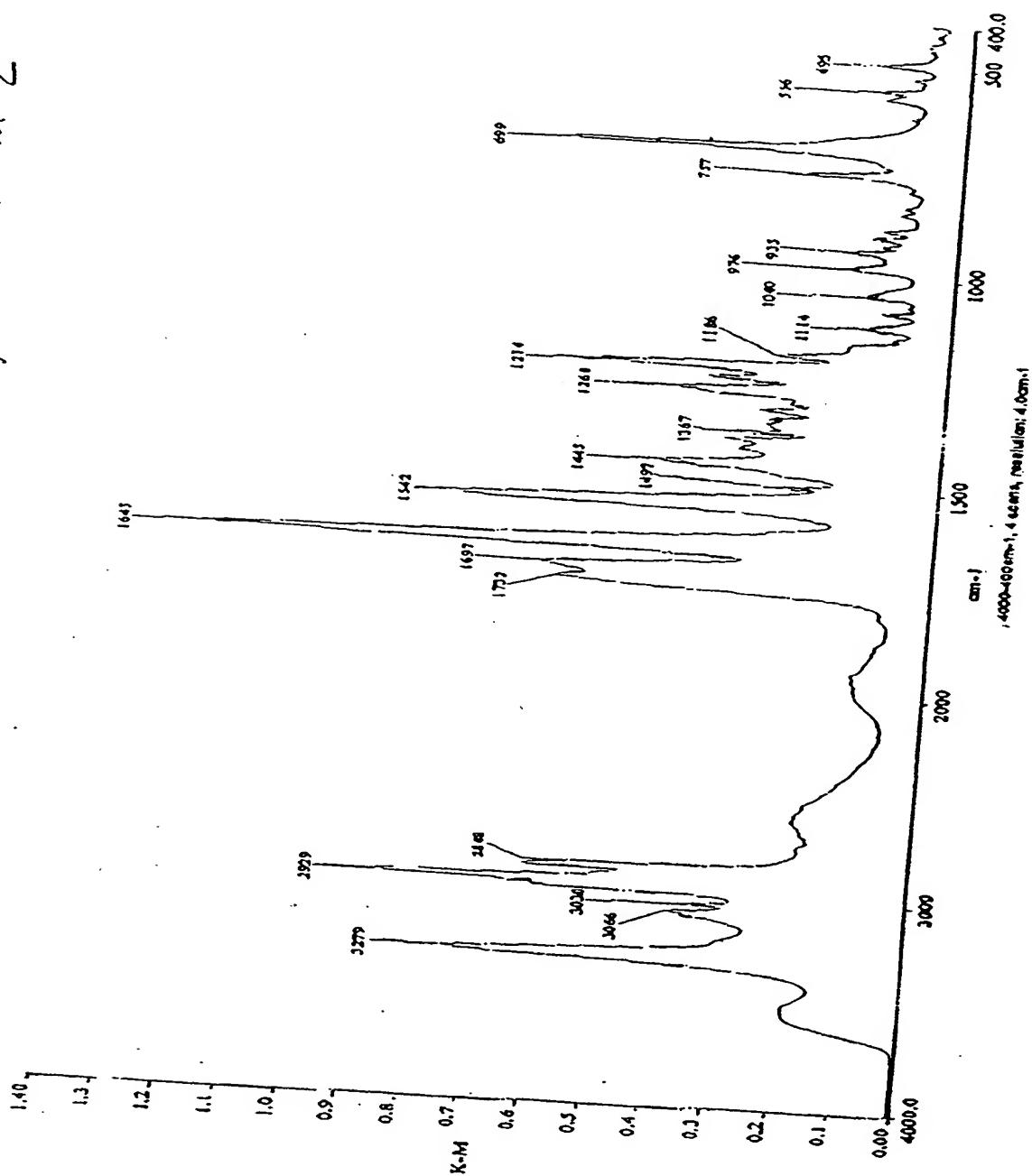


FIGURE 3.3
FIR

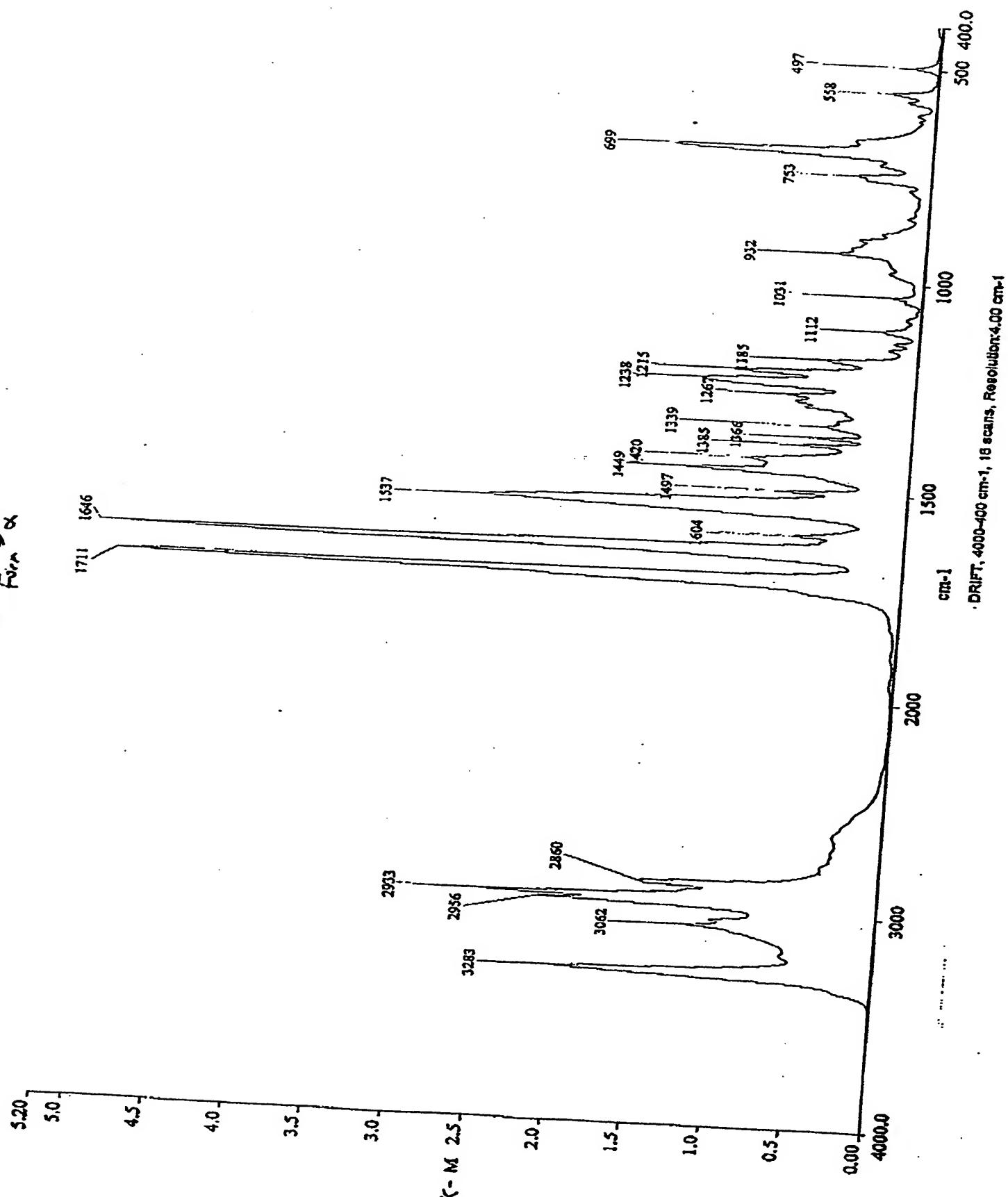


Figure 34 Four delta

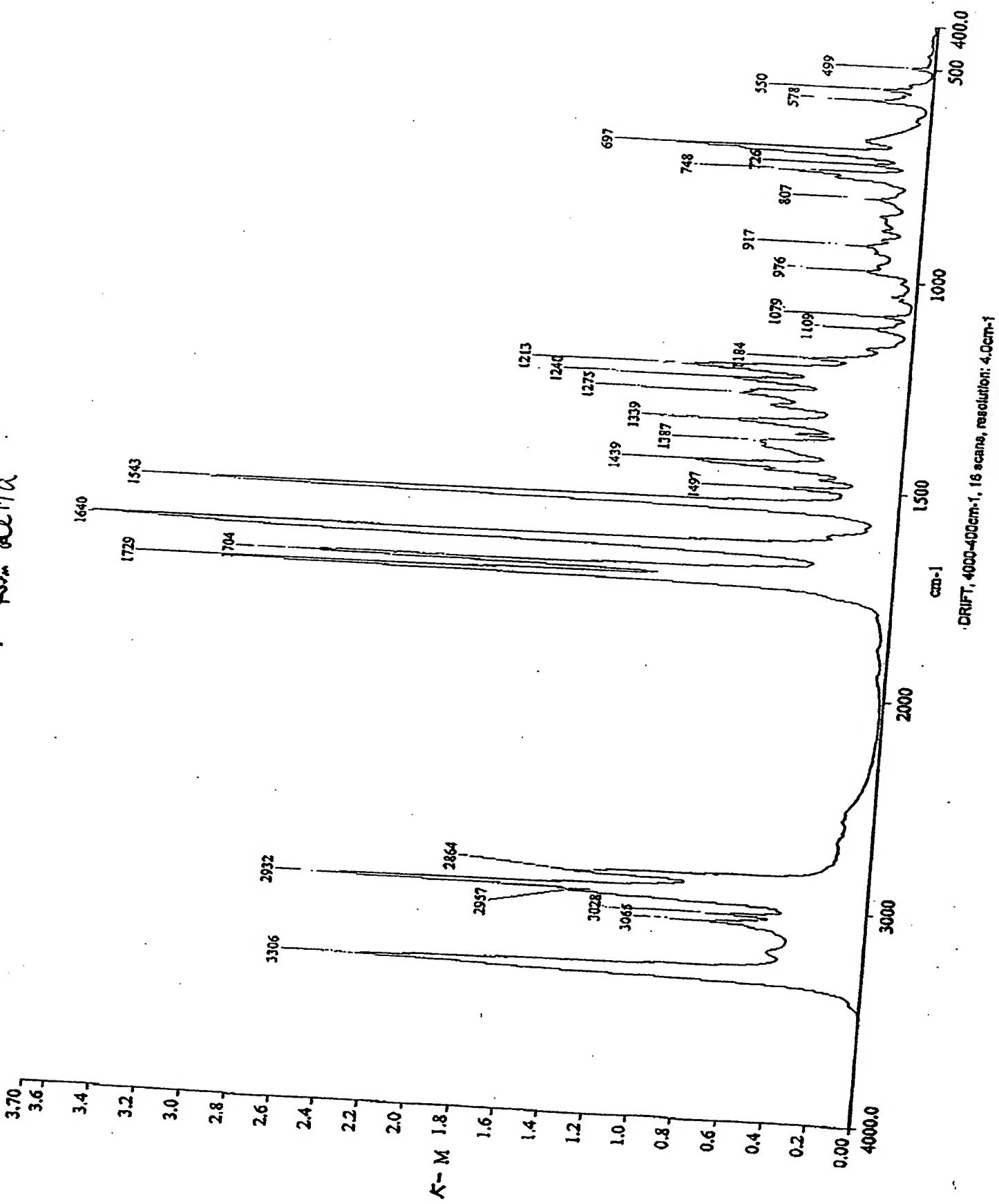


FIGURE 35 - Form 5

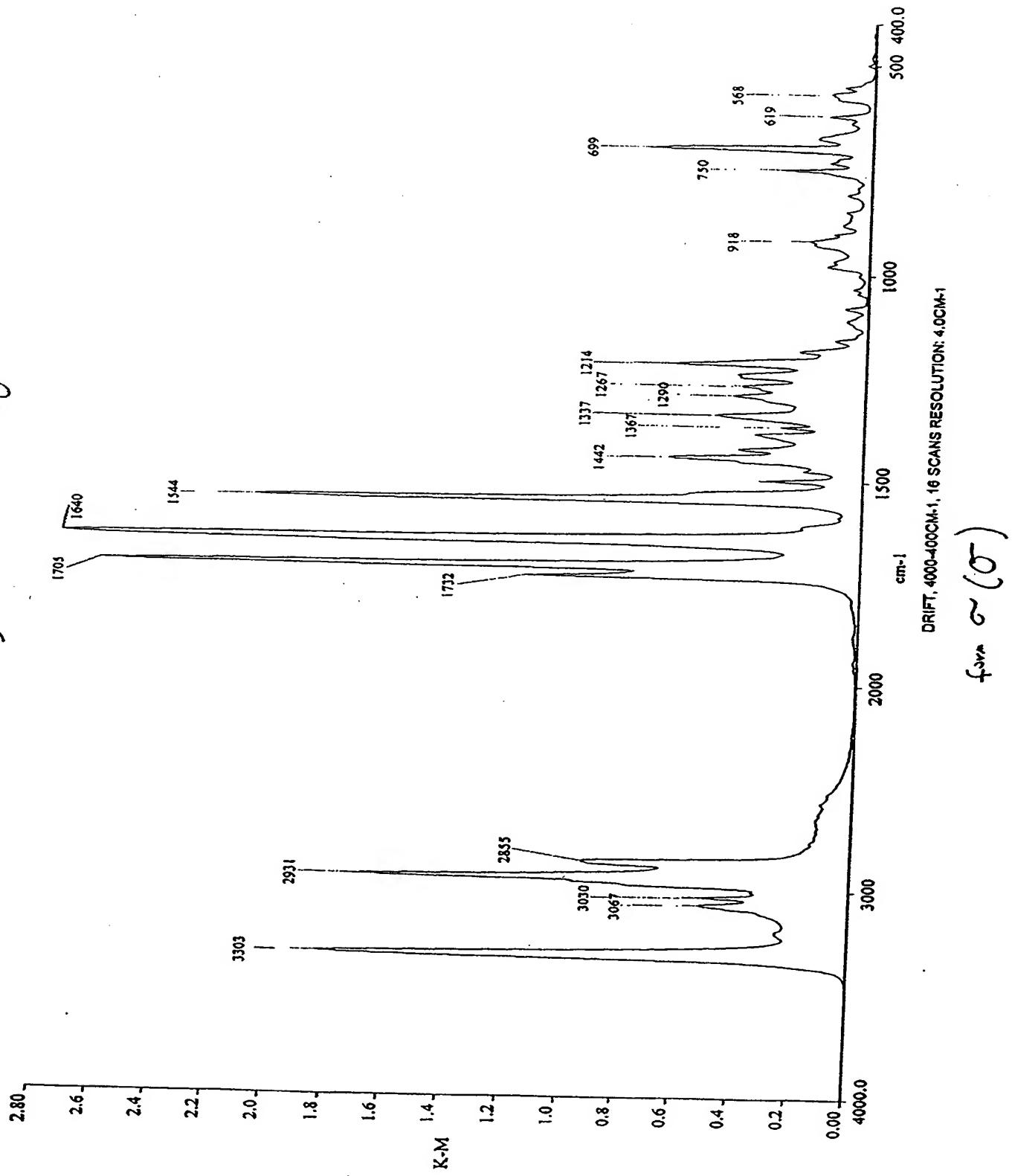


FIGURE 36
Form A

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min

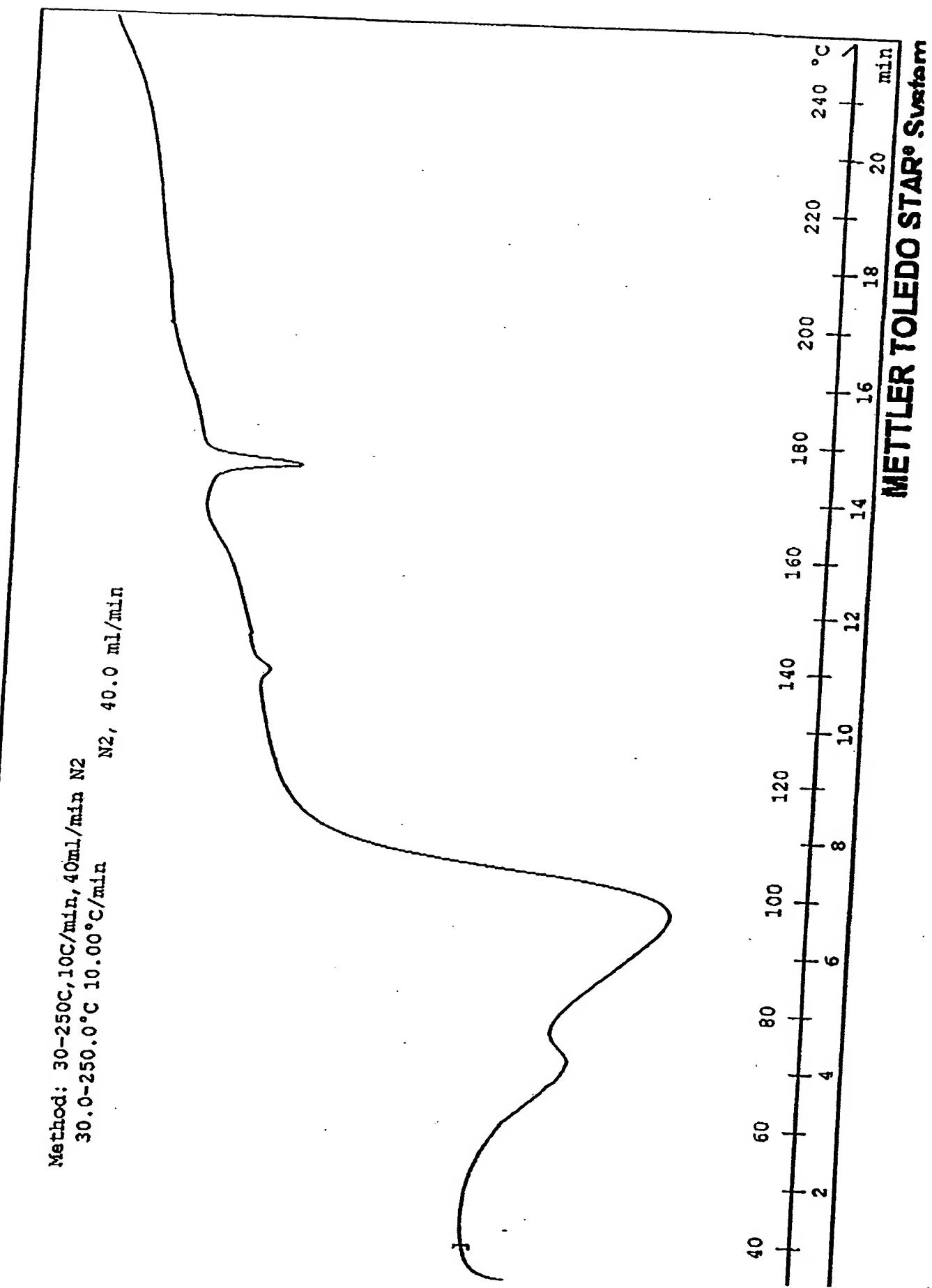
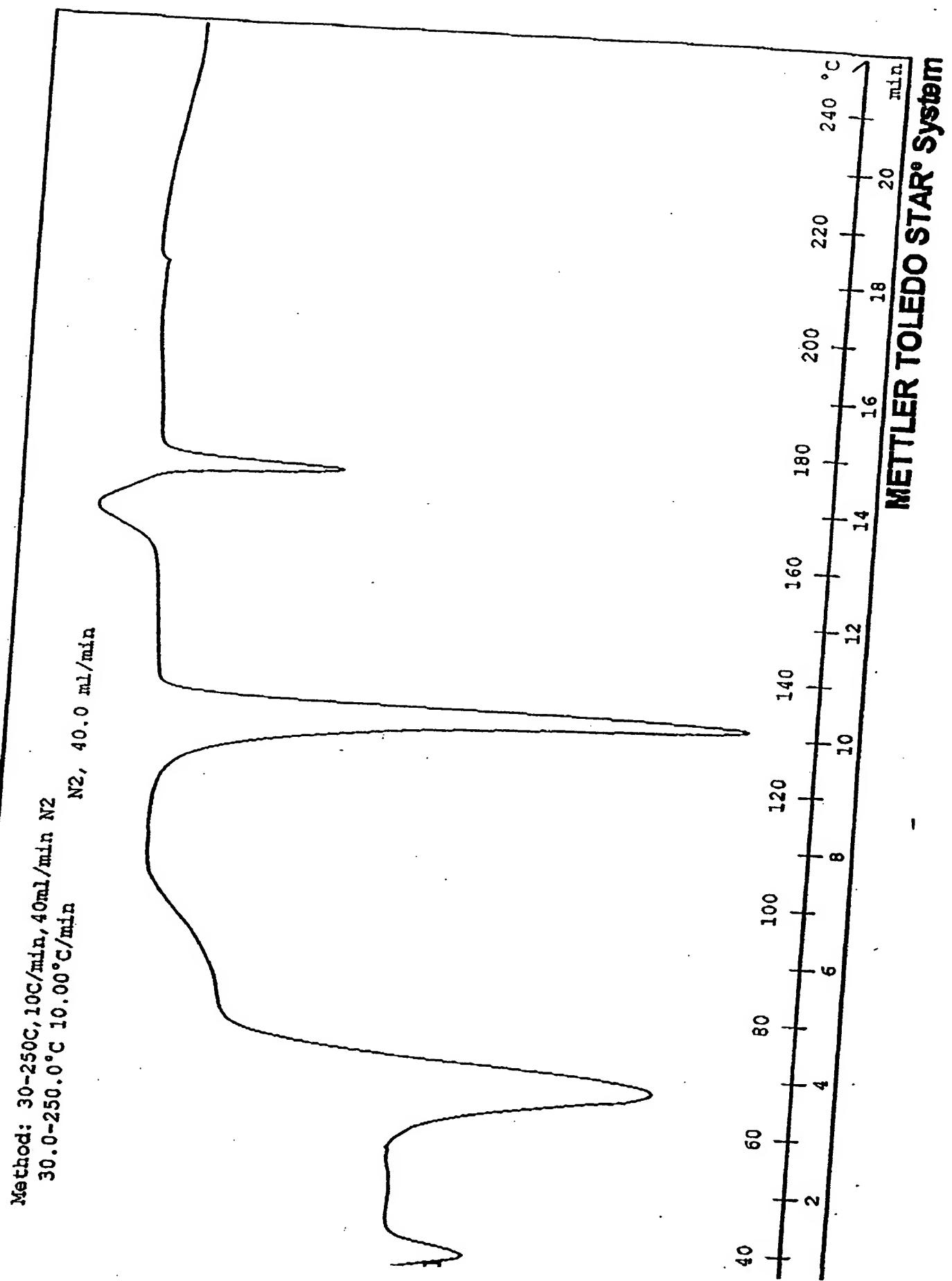


FIGURE 39

Form D

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min

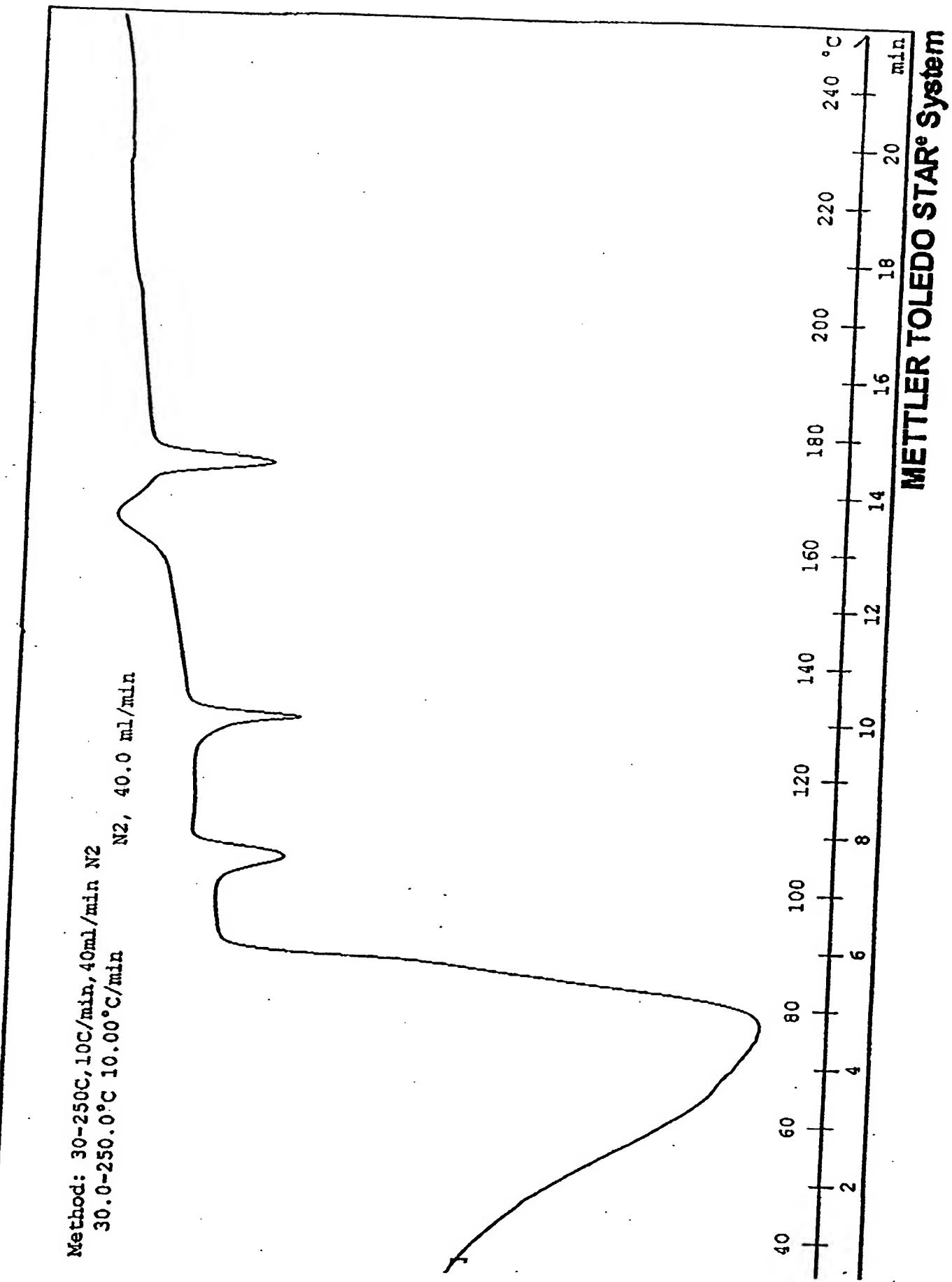


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FIGURE 36

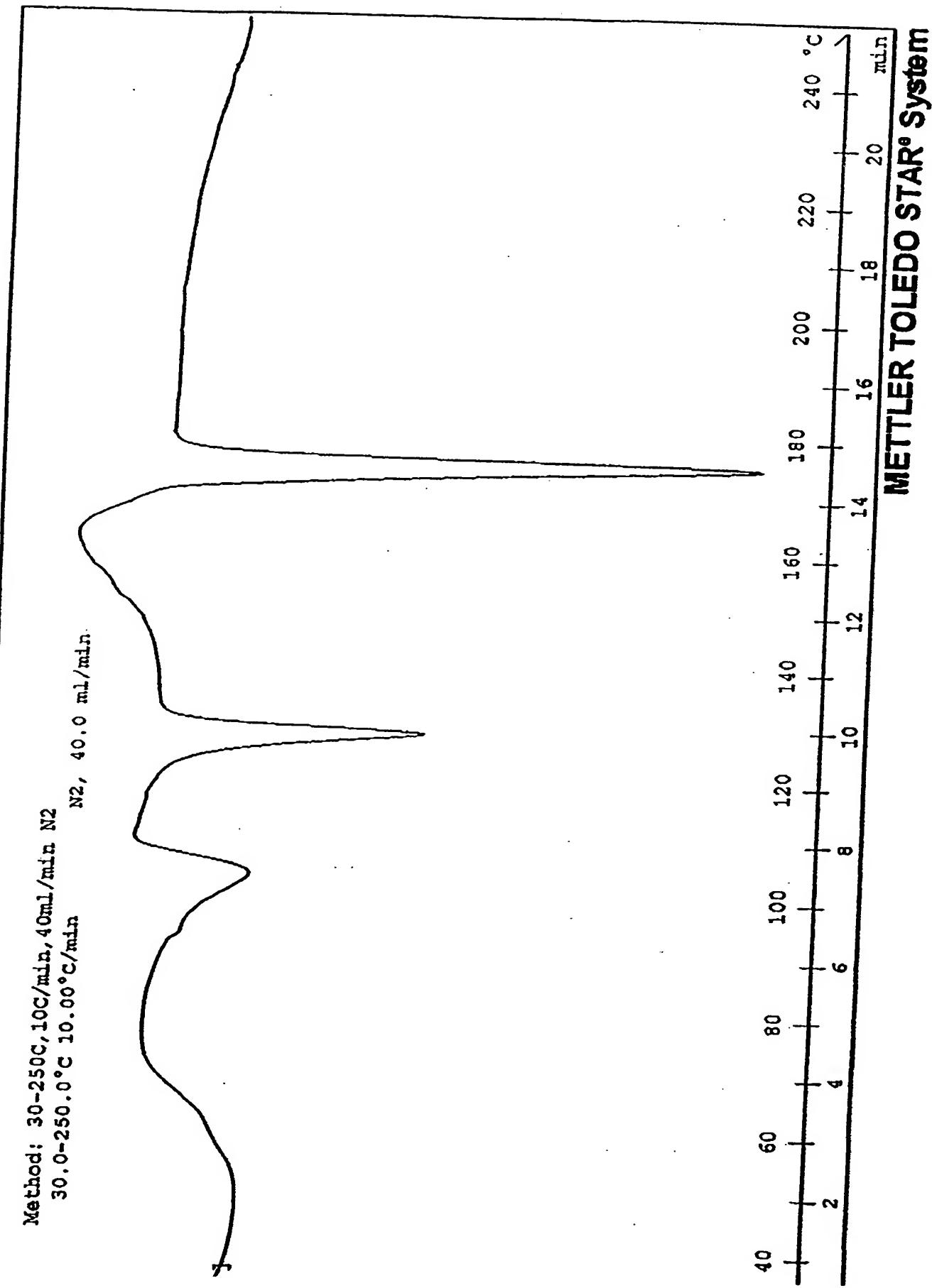
Form E

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min N2, 40.0 ml/min



39
FIGURE

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0 °C 10.00°C/min
N2, 40.0 ml/min.



ΔO
FIGURE 68

XO

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 mL/min

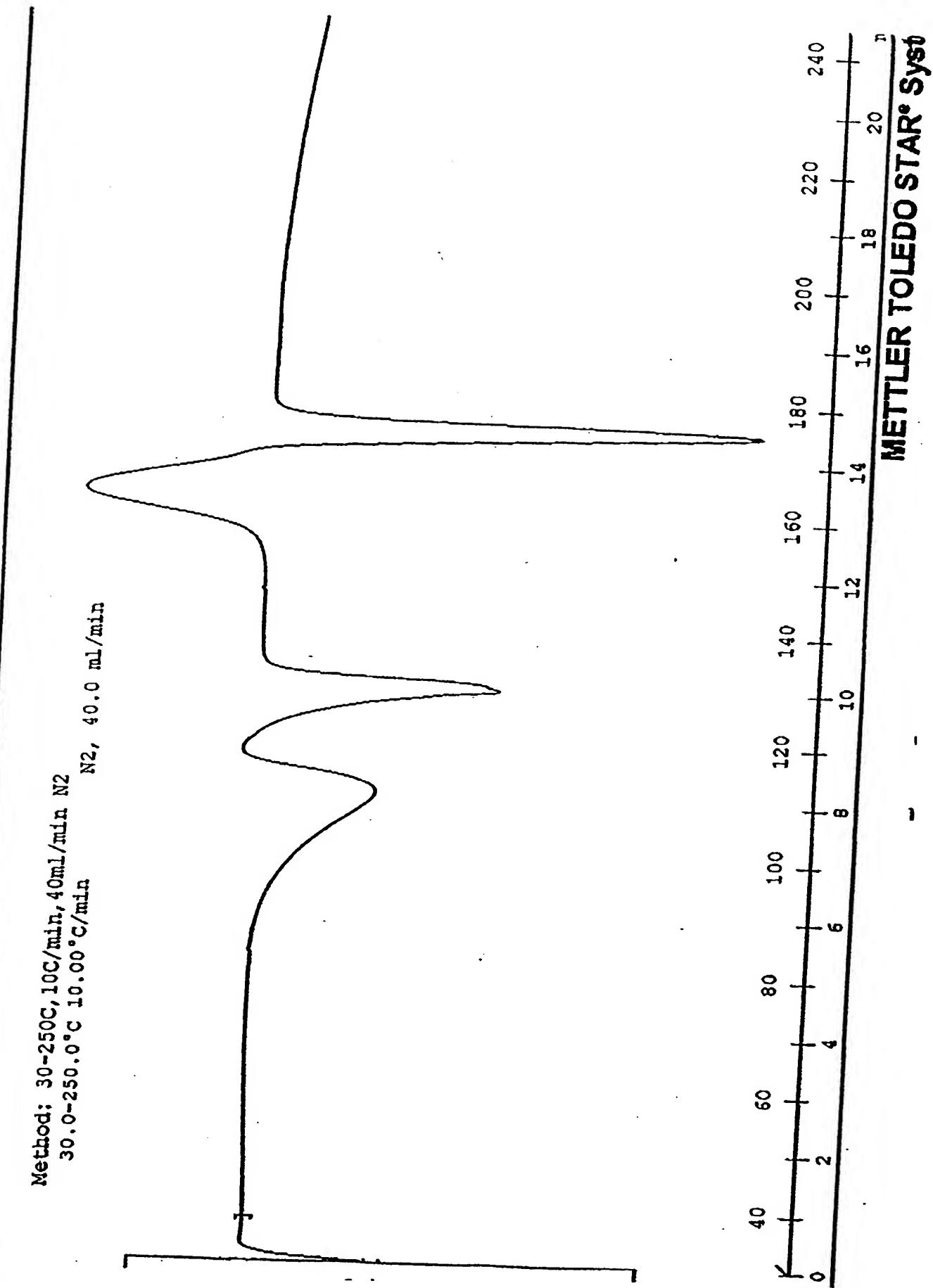


FIGURE 41

Form I

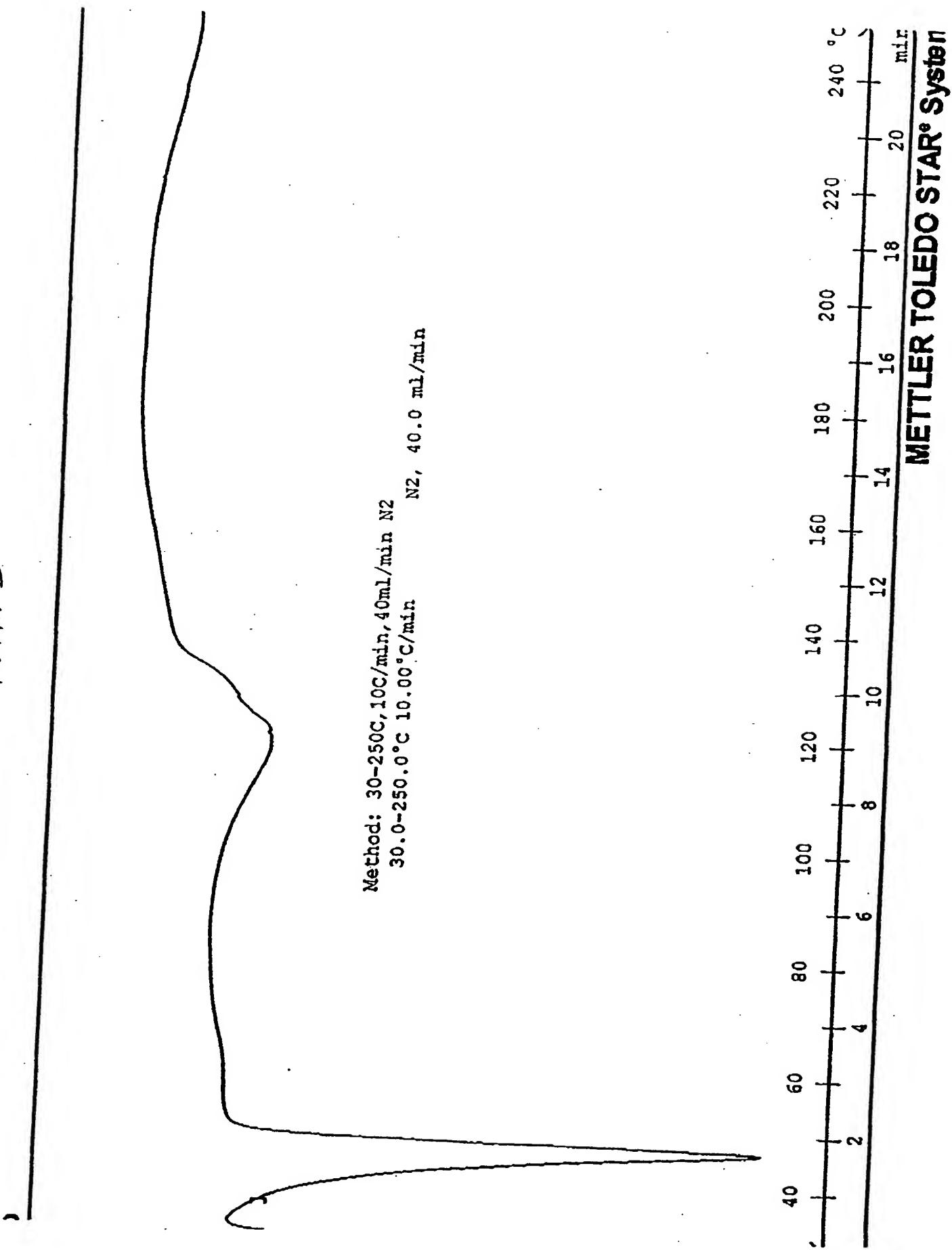


FIGURE 442
Form J

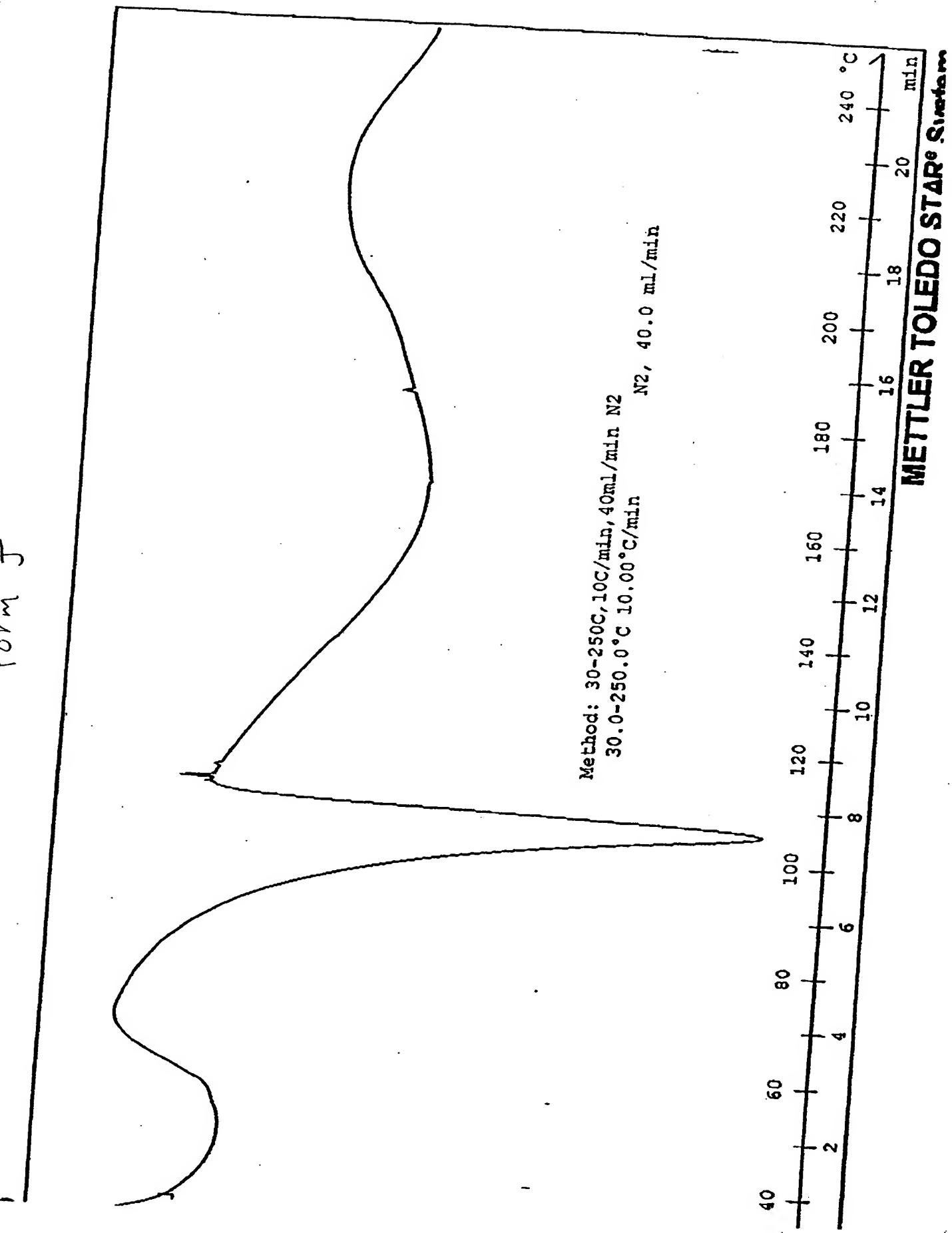


FIGURE # 4/3
Form K

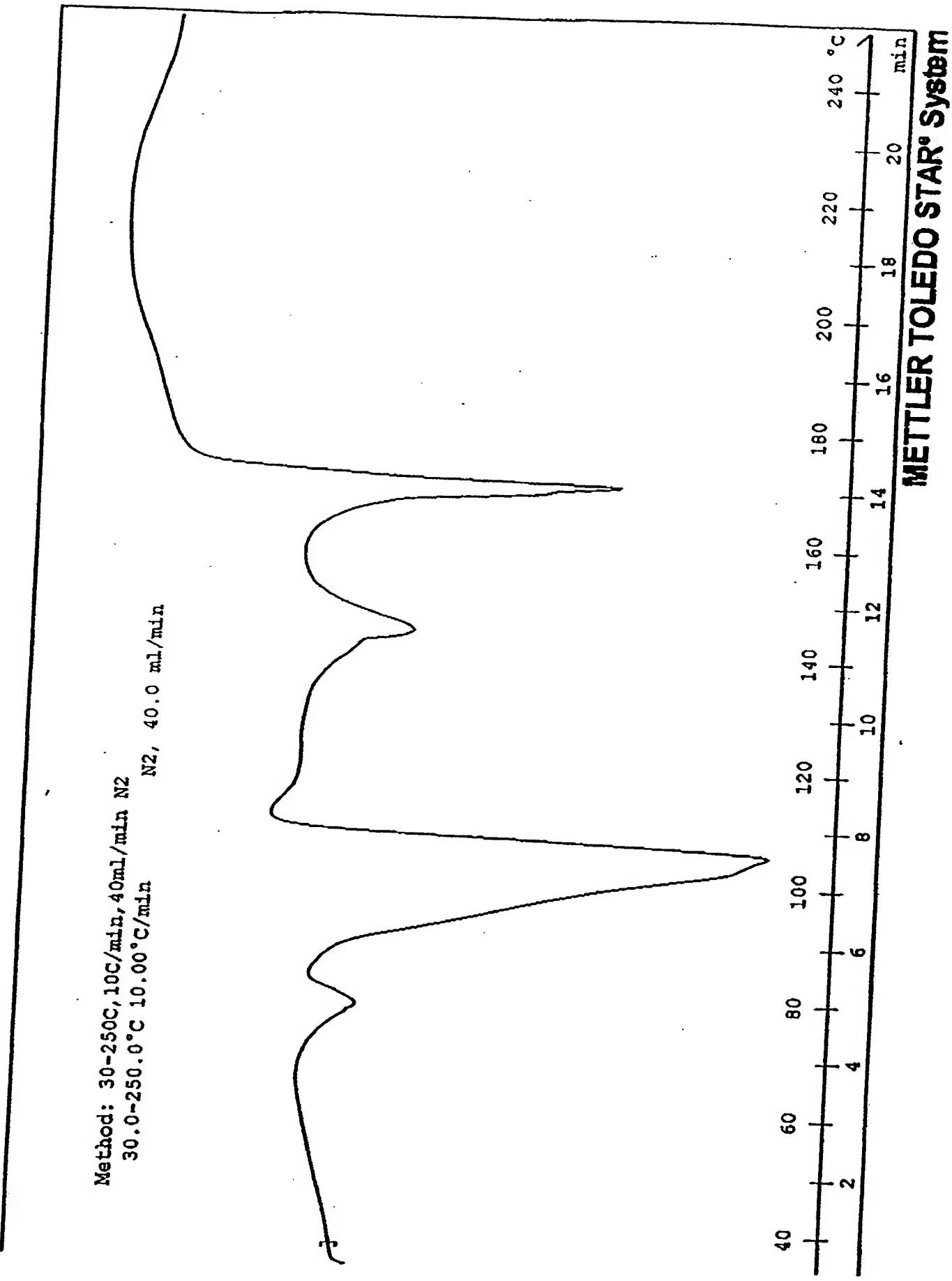


FIGURE 42-4
Form L

Method: 30-250C, 10C/min, 40ml/min N₂
30.0-250.0°C 10.00°C/min N₂, 40.0 ml/min

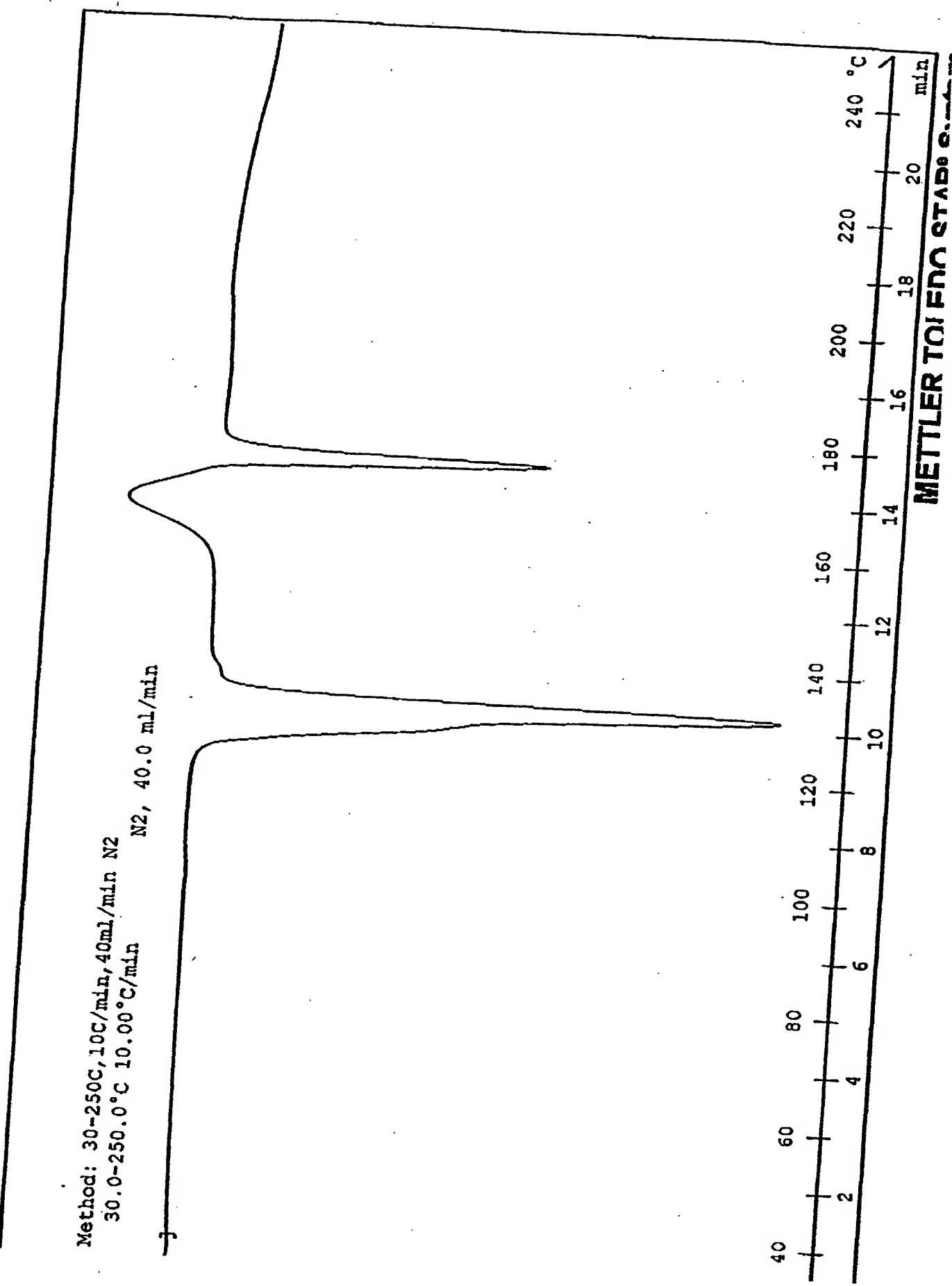


Figure 45
Form M

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 mL/min

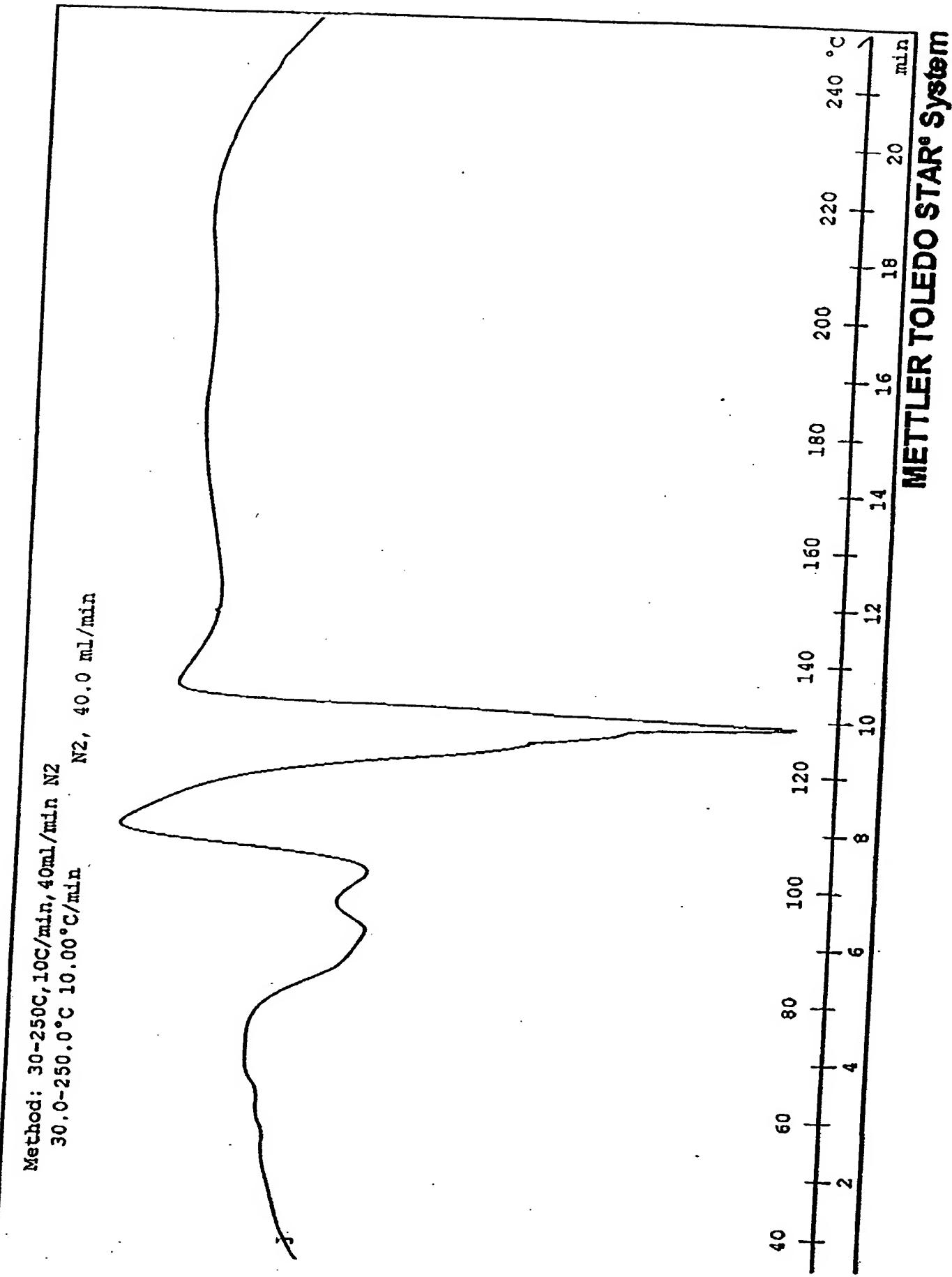
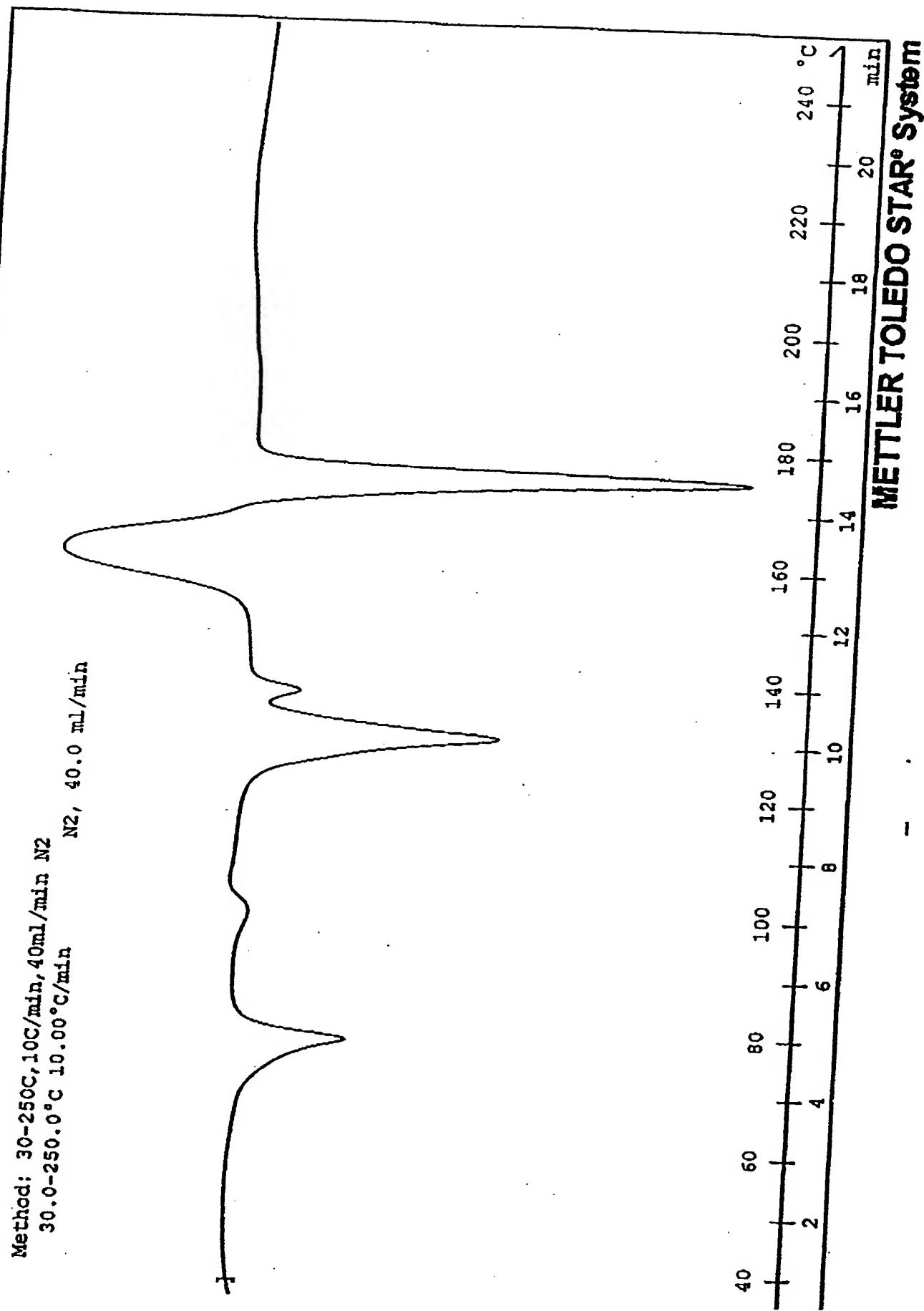


FIGURE 44 4/6
Form N

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min



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FIGURE # 47

Form C

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min

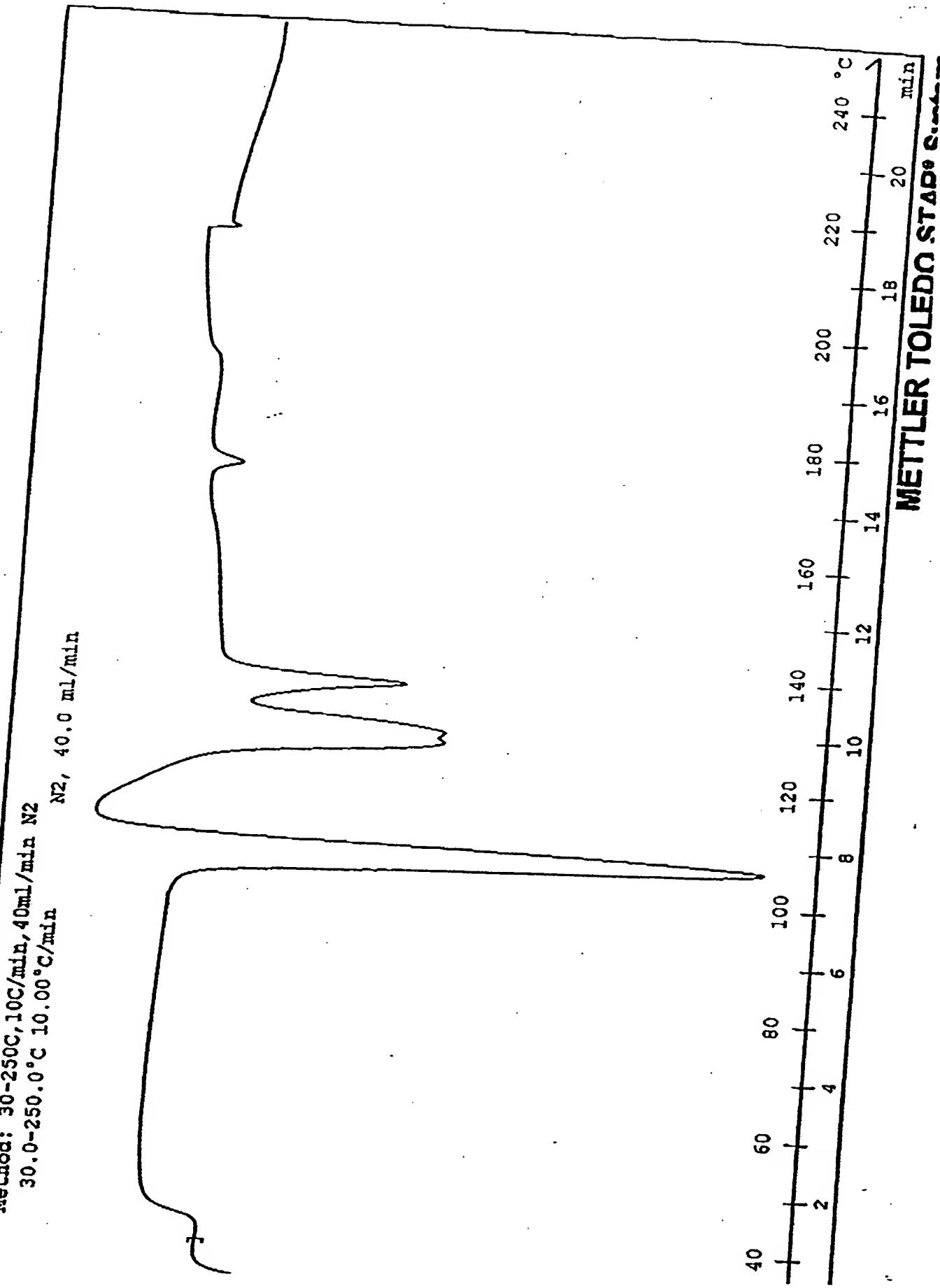


Figure 4-8
Form P

Method: 30-250°C, 10C/min, 40ml/min N2
30.0-250.0 °C 10.00 °C/min
N2, 40.0 ml/min

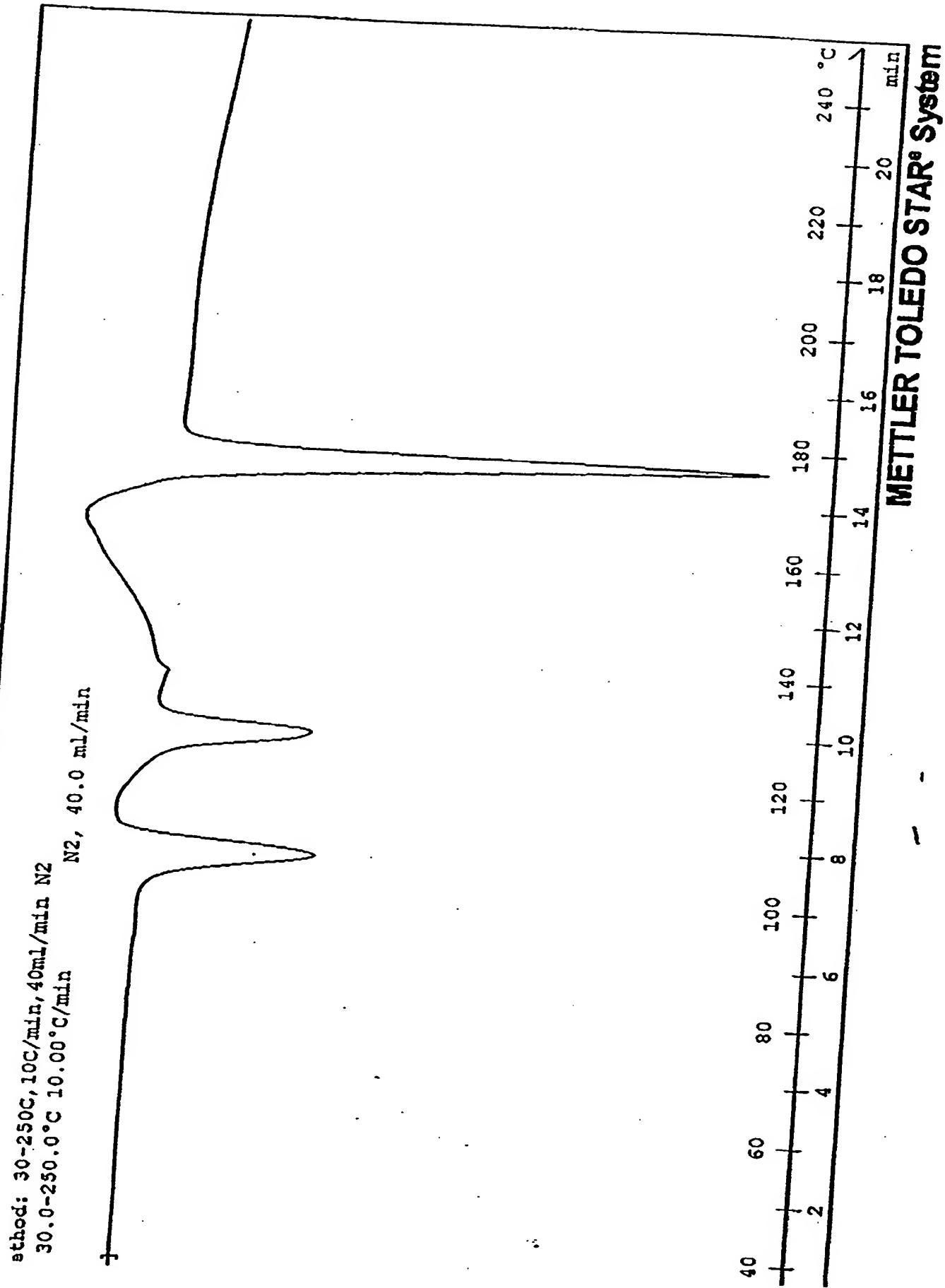
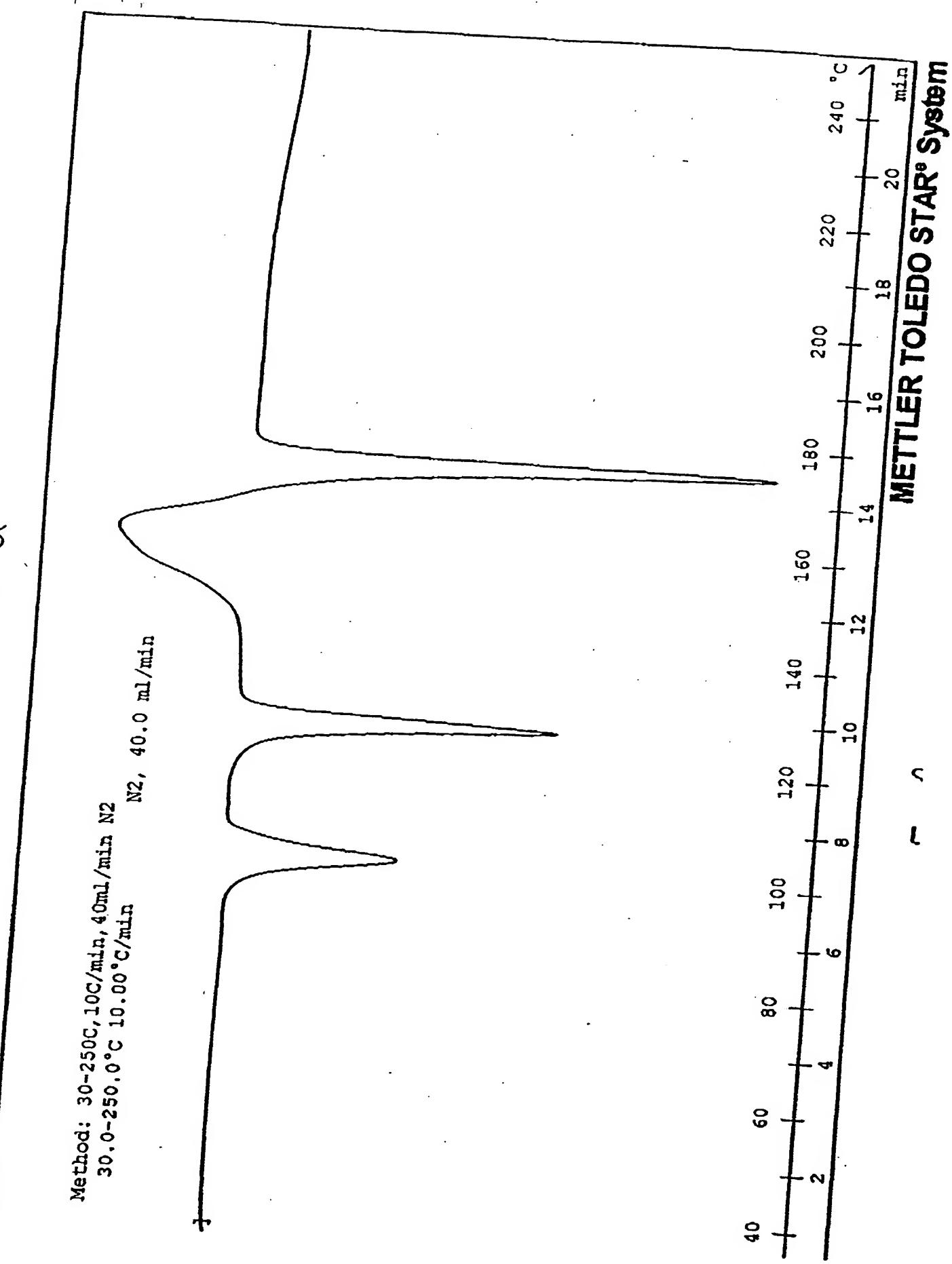


FIGURE #7 49
Form Q

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0 °C 10.00 °C/min
N2, 40.0 ml/min



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FIGURE 48-50
Form T

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 mL/min

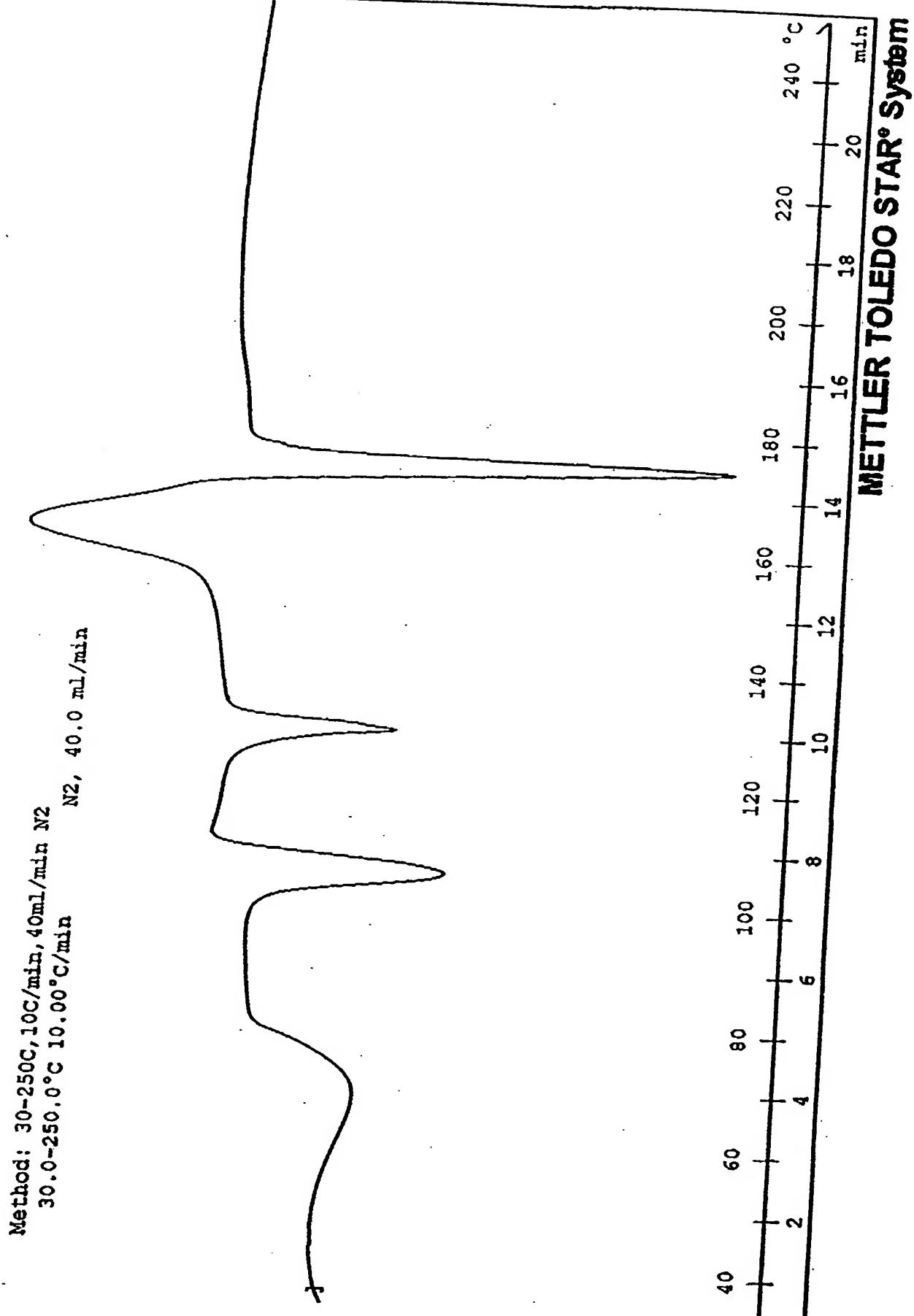
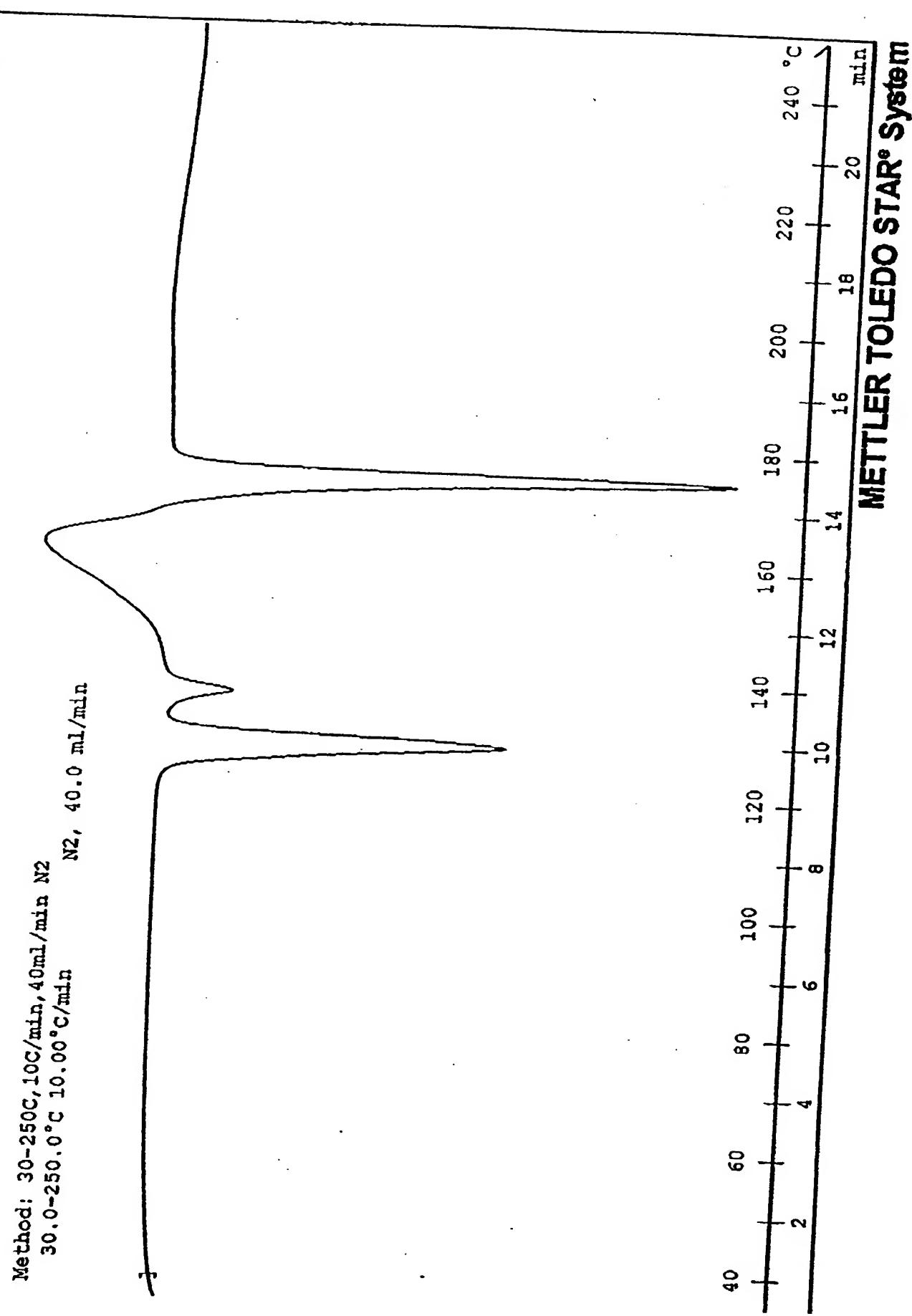


FIGURE 51

Form U

Method: 30-250C, 10C/min, 40ml/min N₂
30.0-250.0 °C 10.00 °C/min
N₂, 40.0 ml/min



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FIGURE 50-52
Form V

Method: 30-250C,10C/min,40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min

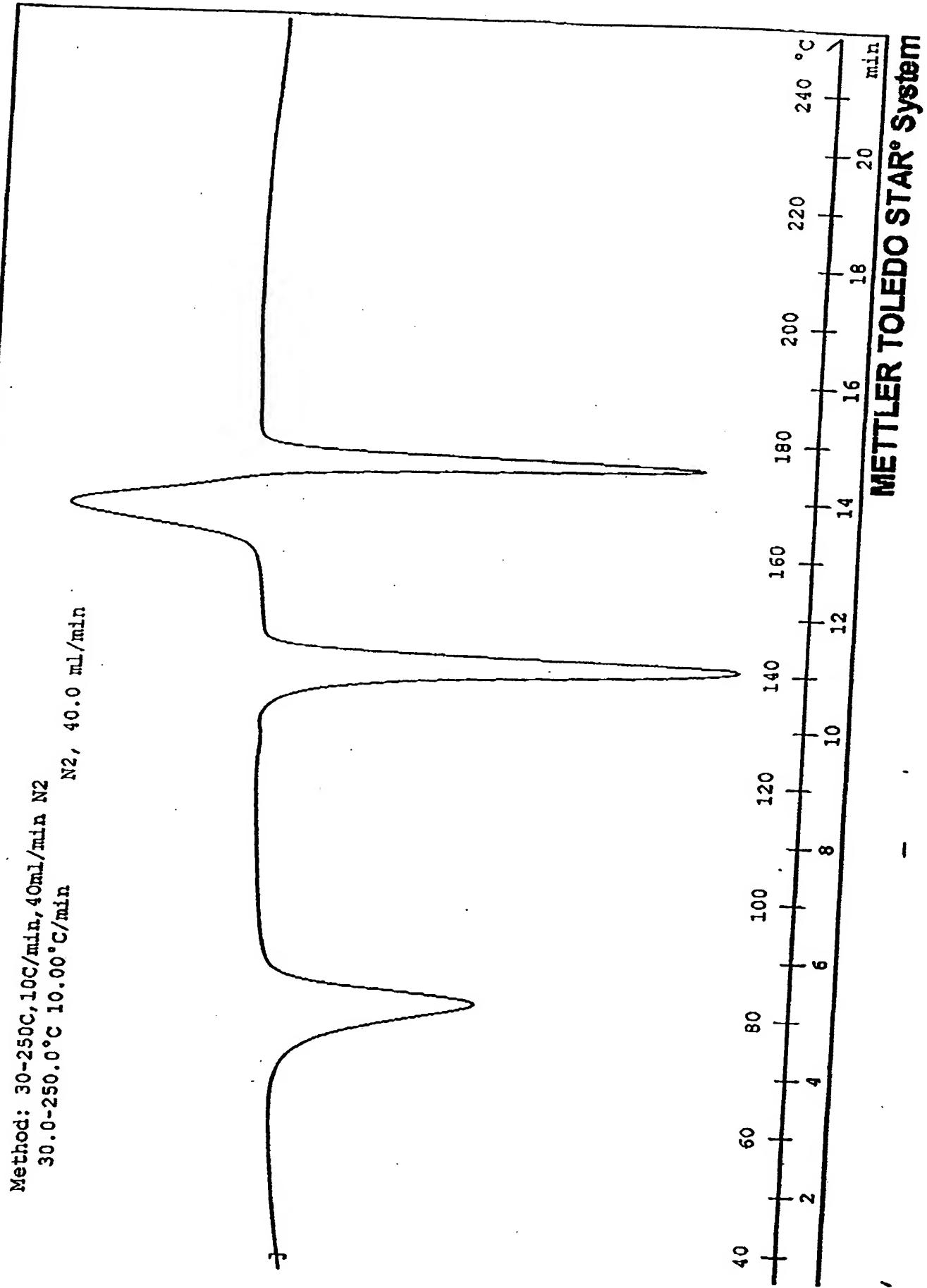


FIGURE 52-53
Form Y (chloroform solvent)

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0 °C 10.00 °C/min
N2, 40.0 ml/min

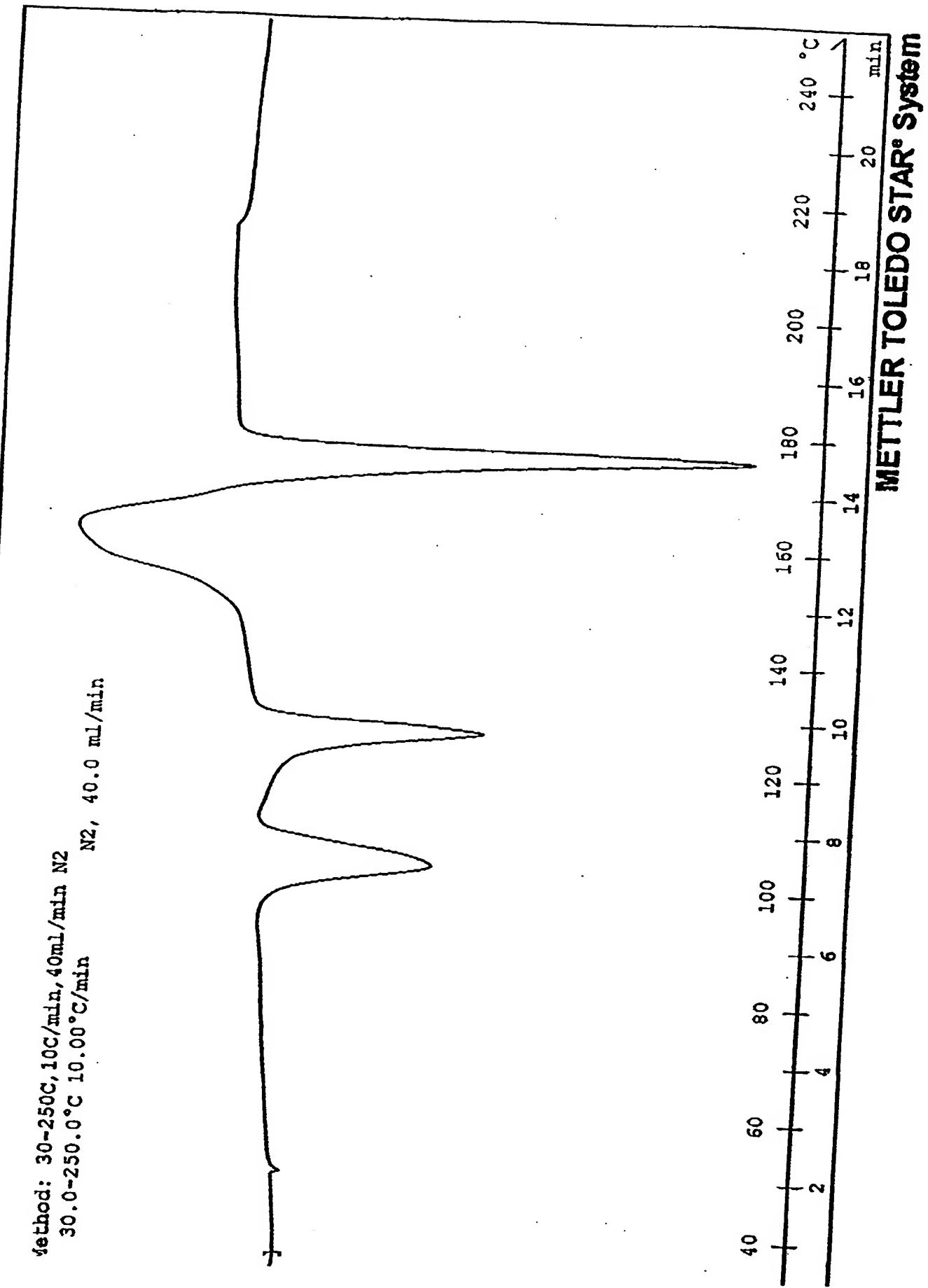
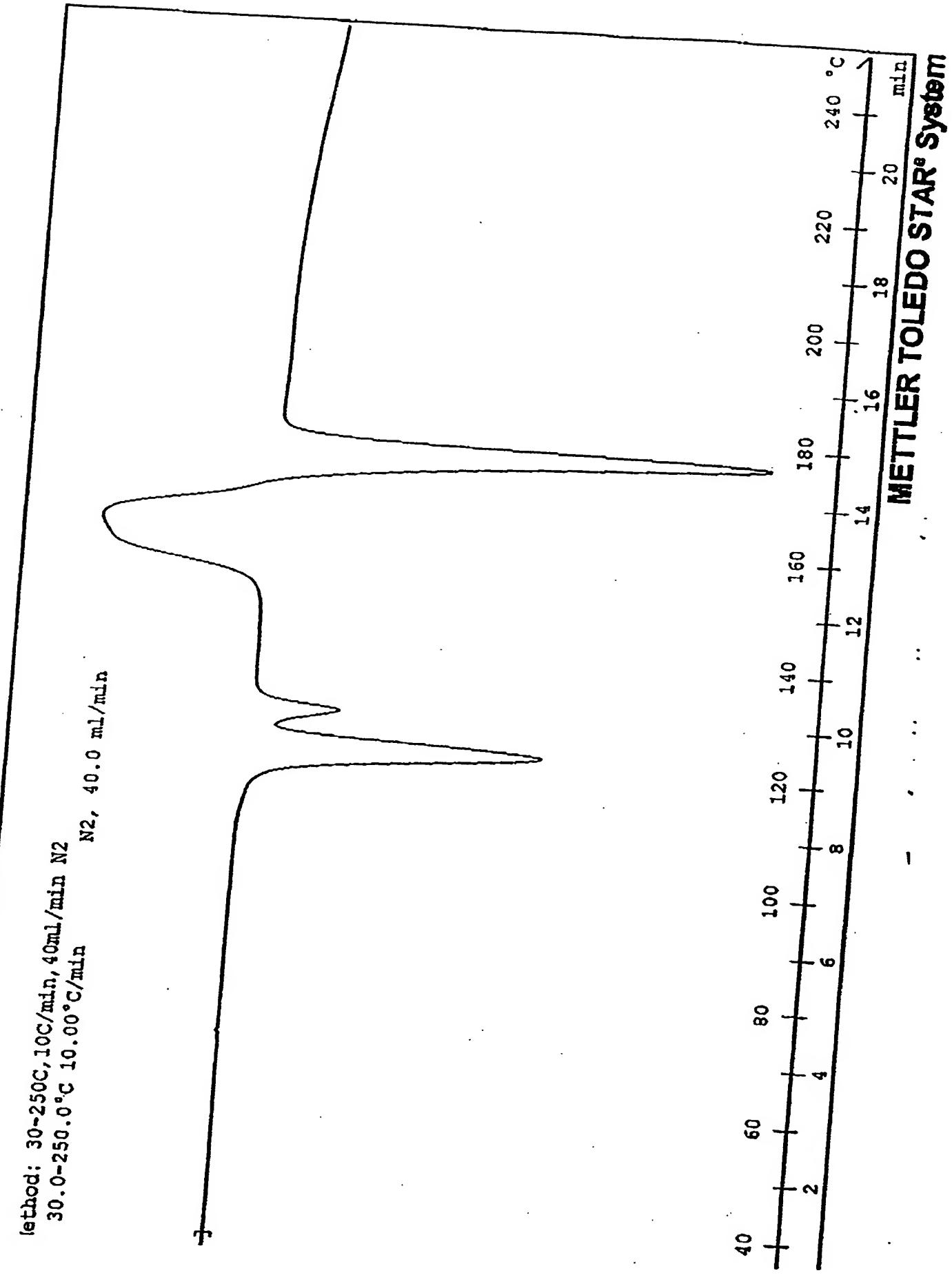


Figure 54
 γ (dichloromethane solution)

Method: 30~250°C, 10C/min, 40mL/min N₂
30.0~250.0°C 10.00°C/min
N₂, 40.0 mL/min



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55

Figure 27 - Nataglindle Form Z

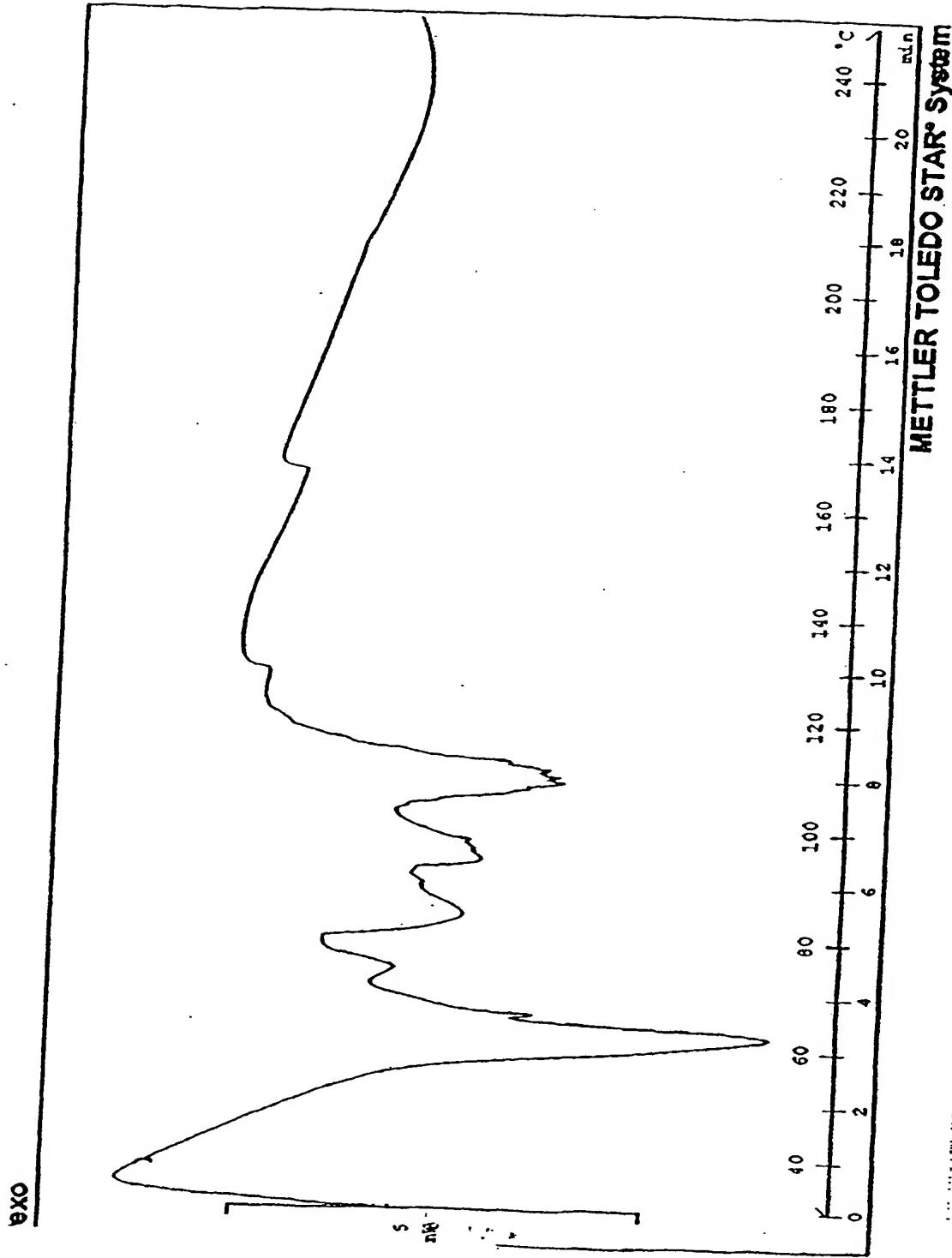


FIGURE 5
For m_α

XO

Method: 30-250C, 10C/min, 40ml/min N₂
30.0-250.0°C 10.00°C/min
N₂, 40.0 ml/min

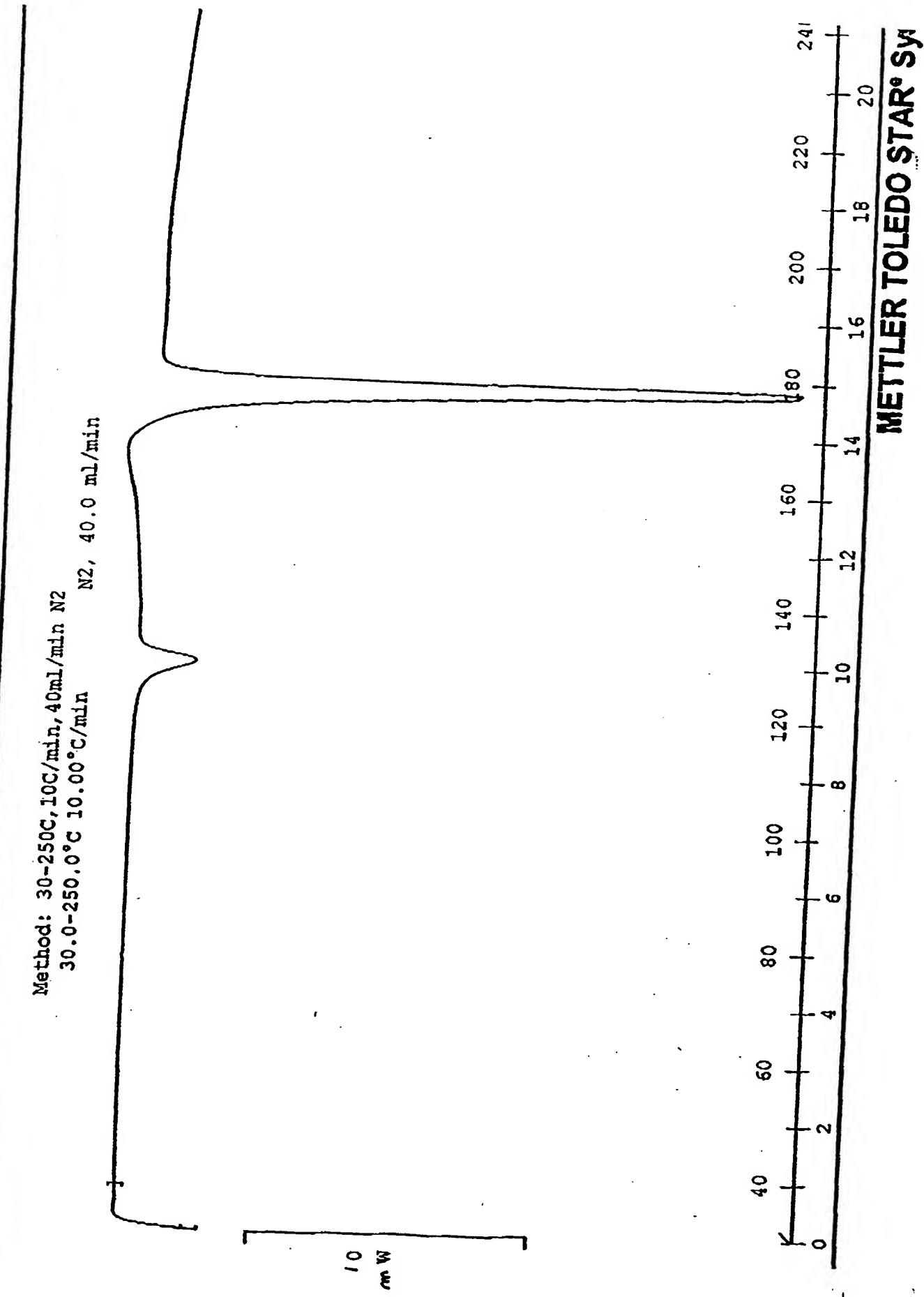


Figure 57
Form Beta

Method: 30~250°C, 10°C/min, 40ml/min N₂
30.0~250.0 °C 10.00 °C/min
N₂, 40.0 ml/min

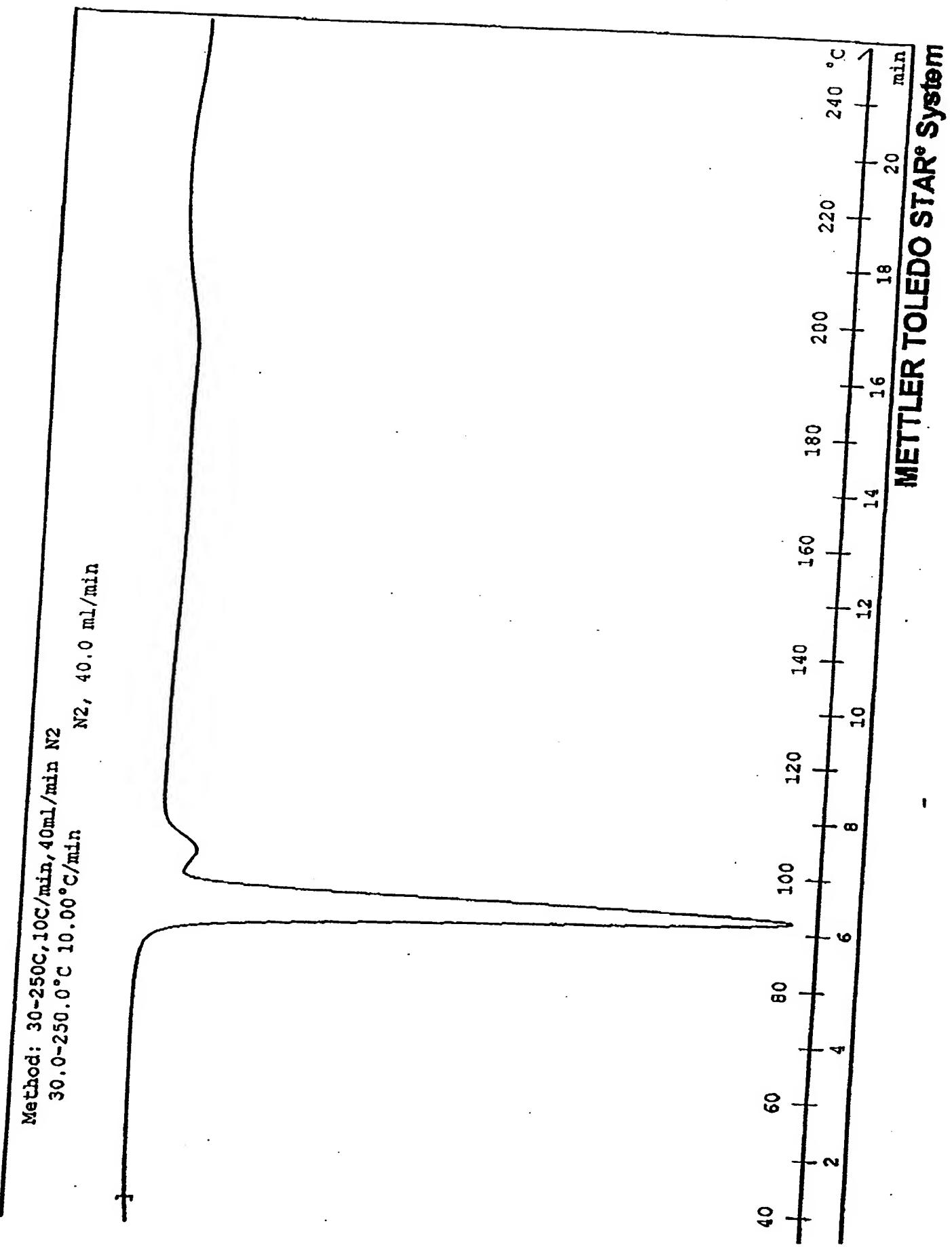
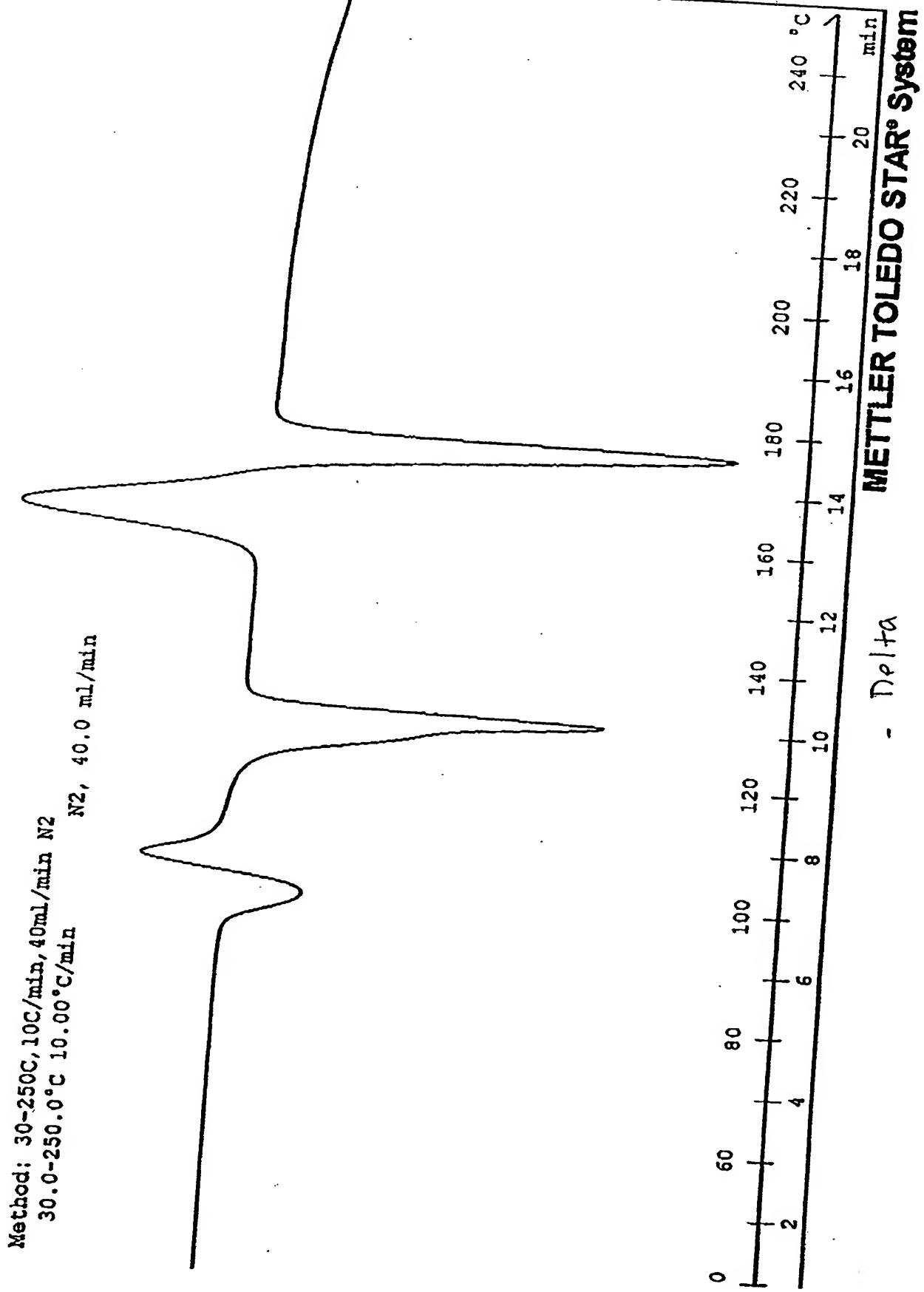


FIGURE 55-58
Form Delta

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min



Form Epsilon /on FIGURE 59

Method: 30-250C, 10C/min, 40ml/min N₂
30.0-250.0°C 10.00°C/min
N₂, 40.0 ml/min

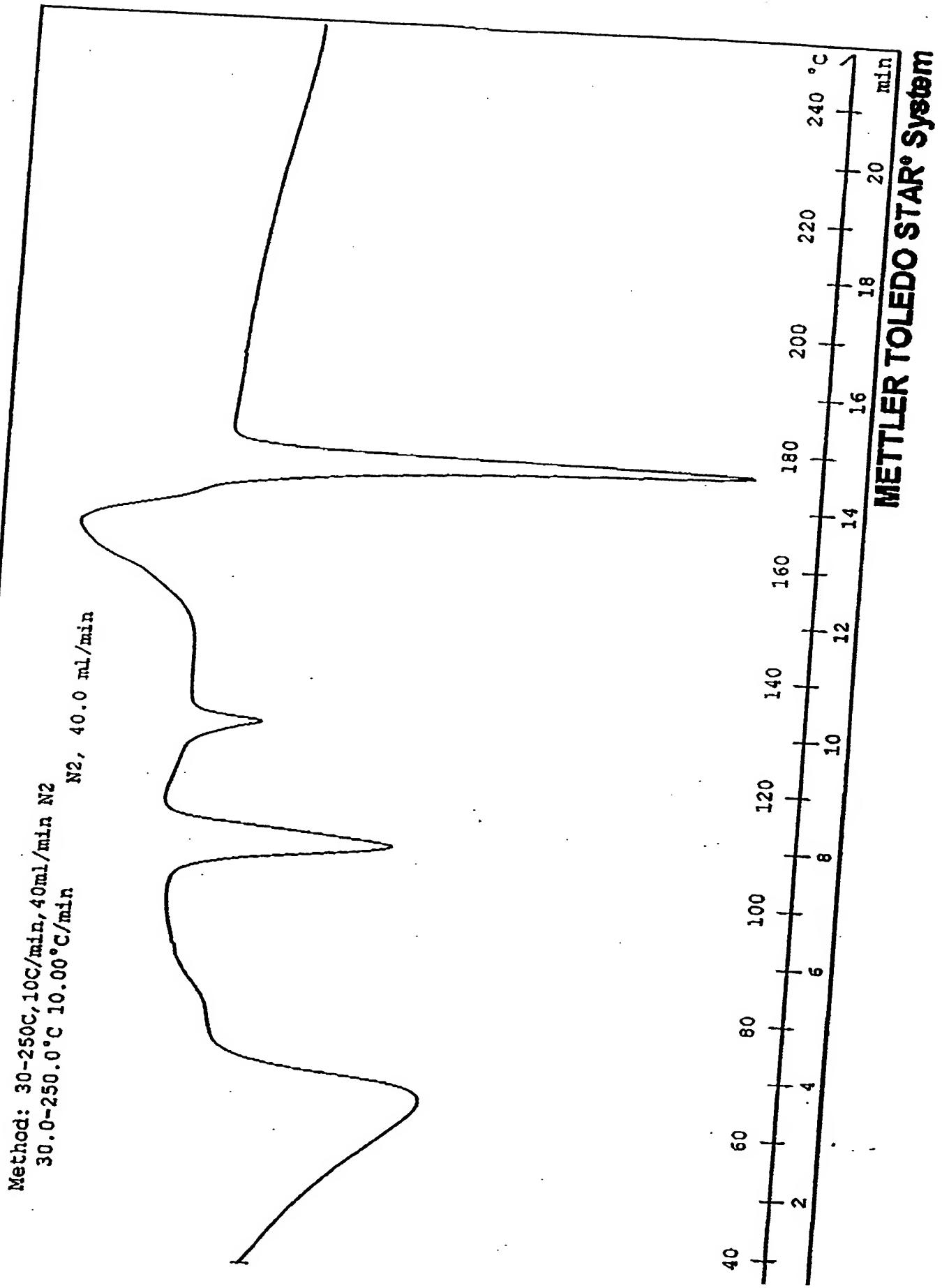
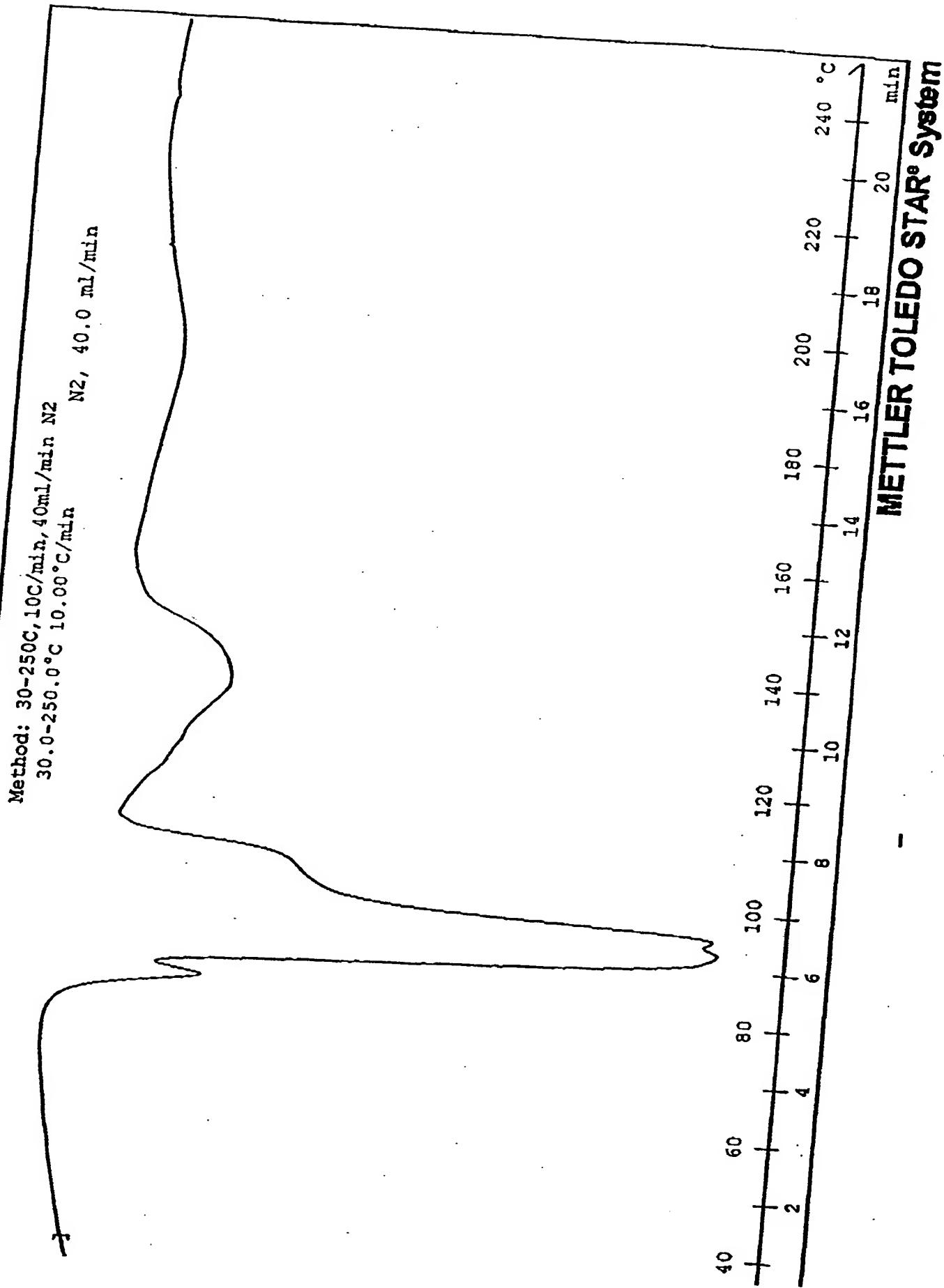


FIGURE 57

60
Form Gamma

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min



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Figure 61 Form Sigma

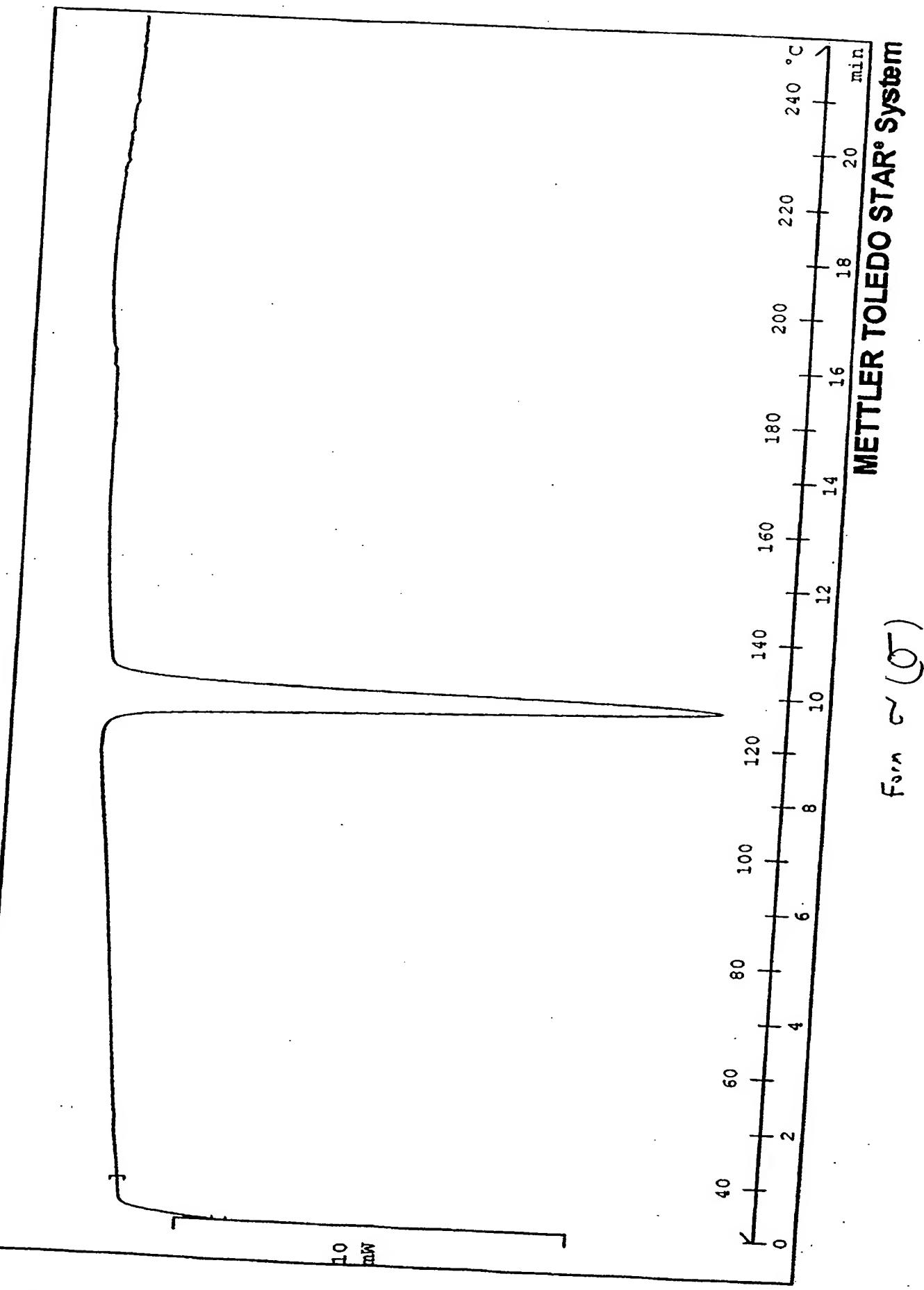
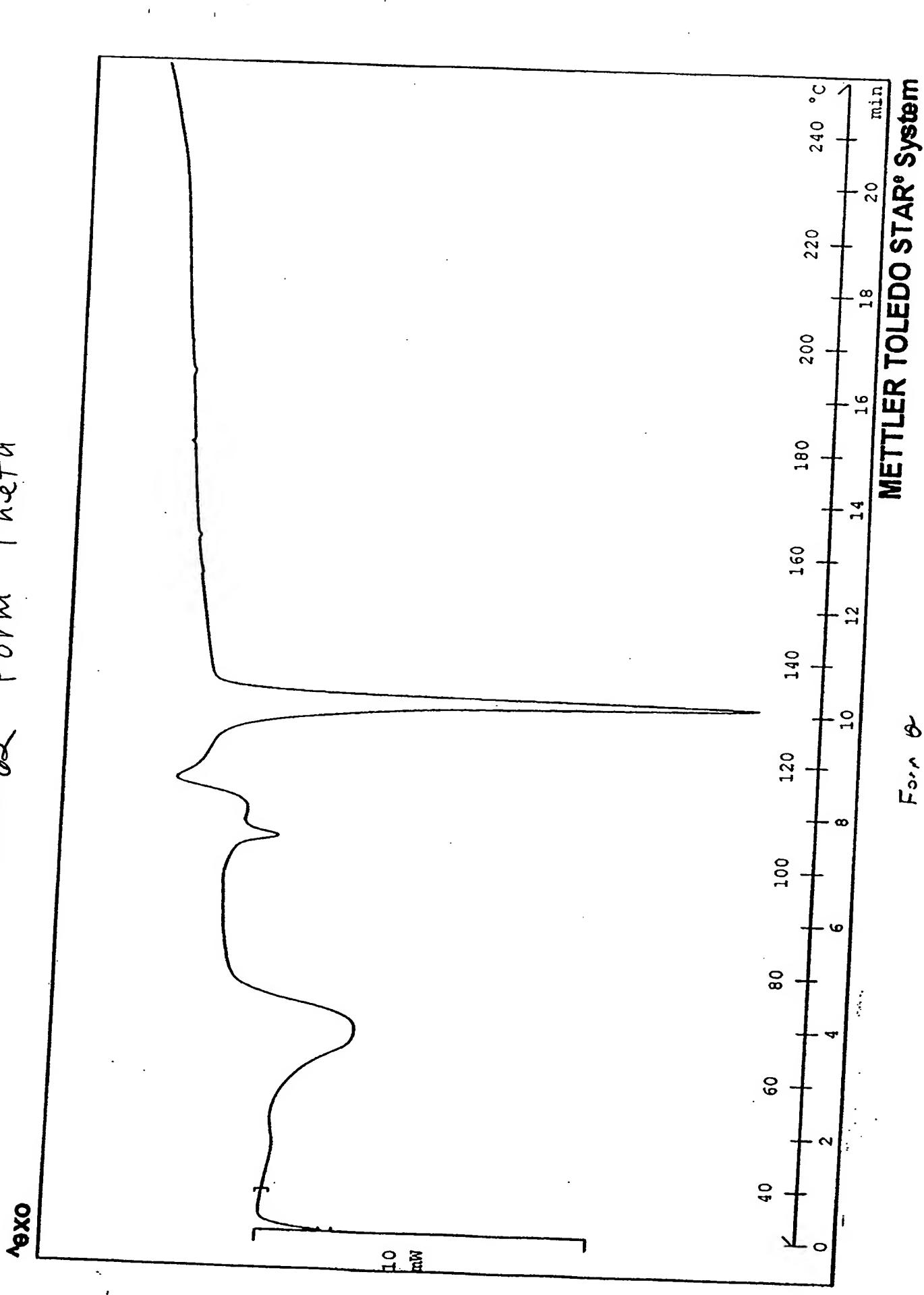


FIGURE 62 Form Theta



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Form Θ

Figure 03

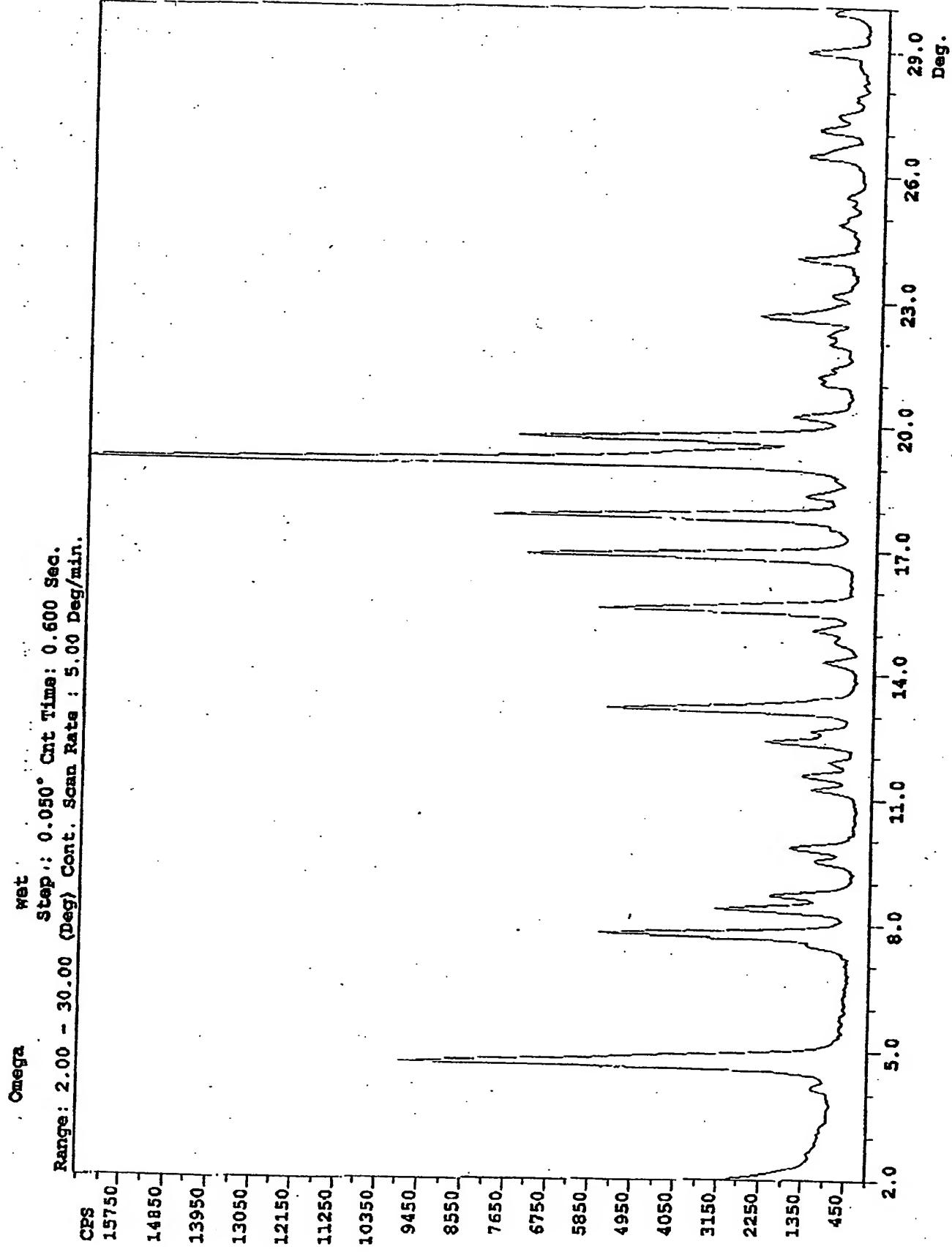


Figure 64

Comparison between the impurity profile of Nateglinide crystallized in IPA-H₂O and Nateglinide crystallized in Methanol-H₂O

Sample No	Solvent	Impurity profile by RRT [% w/w]							
		D-PA (0.23)	(0.25)	(0.46)	(0.80)	Ipcha (0.89)	Dimer (1.38)	Methyl Ester (1.51)	Isopropyl Ester (2.3)
RL-2155/1	Methanol-H ₂ O	<0.01	0.02	<0.01	0.03	0.02	2.91	0.04	0.04
RL-2163/4	IPA-H ₂ O	<0.01	0.04	0.02	0.02	0.01		0.03	0.02

Note: D-PA means D-Phenyl Alanine

Ipcha means Iso propyl cyclohexyl carboxylic acid

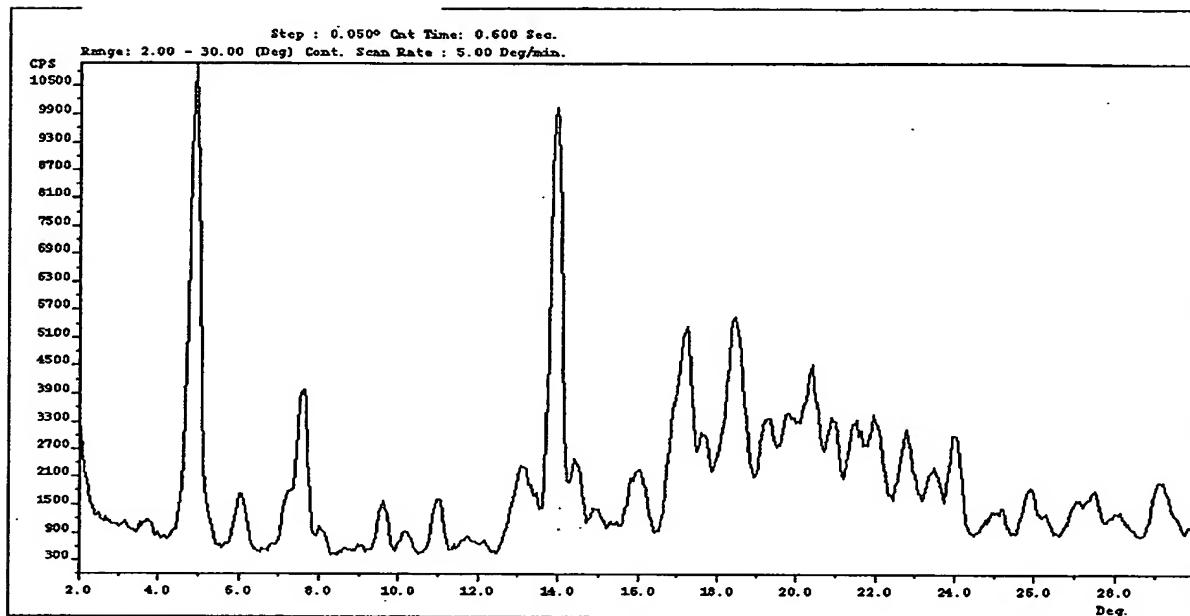
Both are the starting materials of the product

(-)-N-[(trans-4-isopropyl cyclohexane)carbonyl]-D-phenylalanine

Newly Added

Figure 65

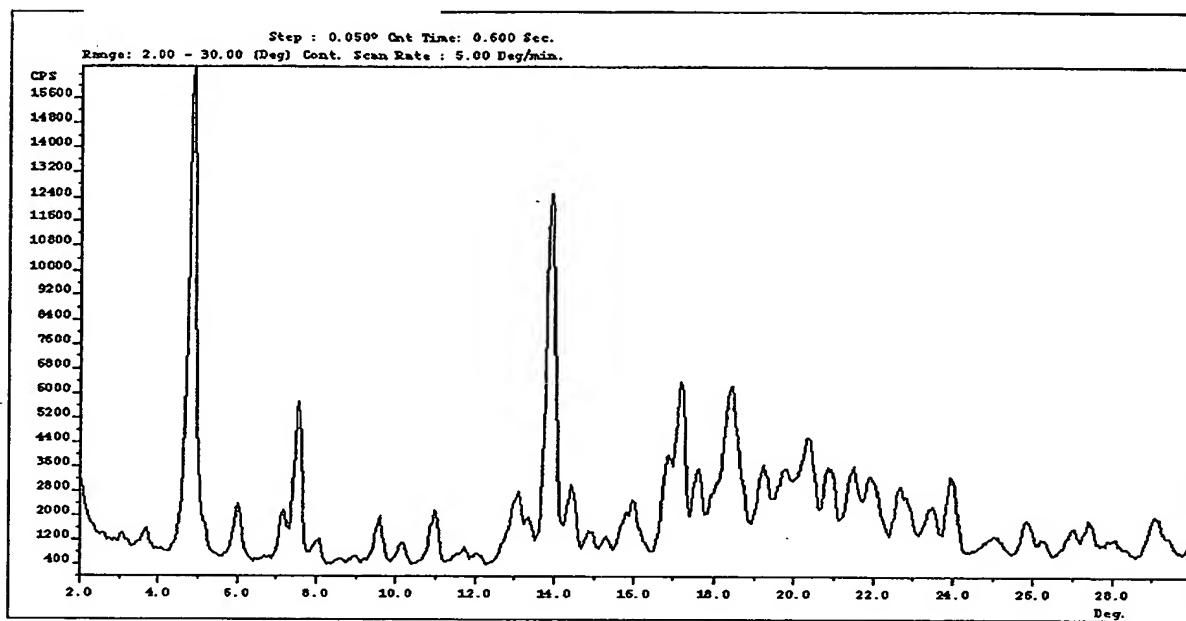
Form U- Crystallization in Ethyl-Acetate – drying at 30°C- Sample prepared according to Example 17.



Newly Added.

Figure 66

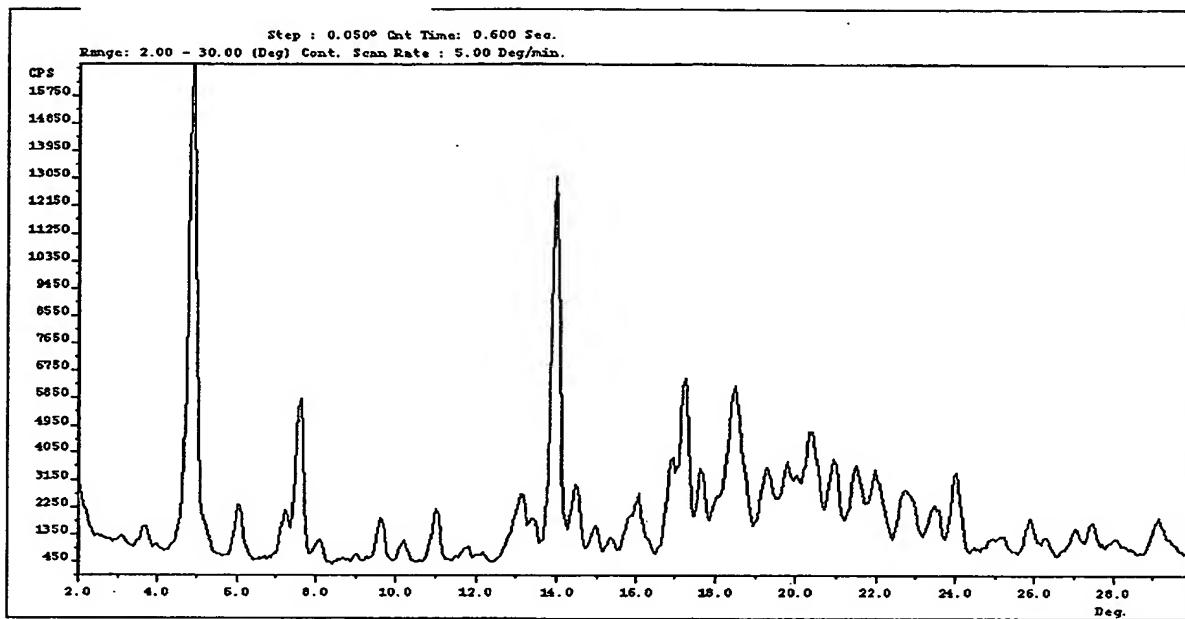
Form U- Crystallization in Ethyl-Acetate – drying at 50°C - Sample prepared according to Example 17.



Newly Added.

Figure 67

Form U- Crystallization in Ethyl-Acetate – drying at 90°C - Sample prepared according to Example 17.



Newly Added.

Figure 68

Form U- Crystallization in Acetone - Sample prepared according to Example 17.

